

THE ARMOURIES OF THE TOWER OF LONDON



MCMXVI

McKEW PARR COLLECTION



MAGELLAN
and the AGE of DISCOVERY



PRESENTED TO
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SER GEORGE HOWARDE KNIGHT MASTER OF
THE QWENES MAIESTIES ARMORY ANNO DOM,
1561

INVENTORY AND SURVEY

OF THE

Armouries

OF THE

Tower of London

BY

CHARLES J. FFOULKES, B.Litt.Oxon, F.S.A.

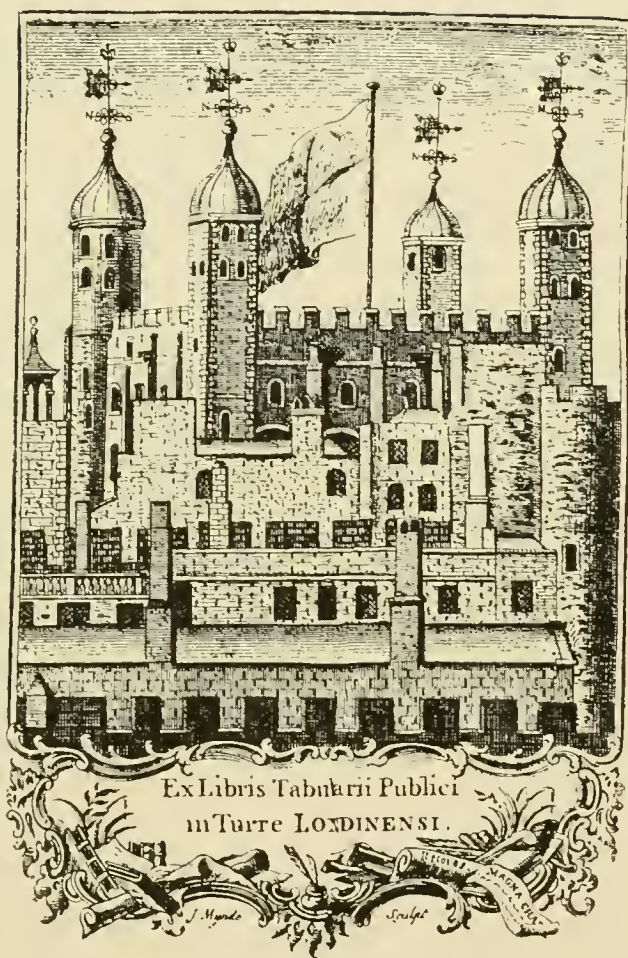
CURATOR OF THE ARMOURIES



VOLUME I.

LONDON :

Published by His Majesty's Stationery Office



Book Plate of the Record Office in the Tower

by

J. MYNDE

circa 1760

To
The King's Most Excellent Majesty

SIRE,

IN laying this History and Inventory of the Armouries of the Tower of London before Your Majesty, I cannot but feel that, in a work of this nature, it would be unfitting that I should take credit for more than the compilation and collation of a large amount of work done by others in the past. In tracing the changes that have taken place from the time when the Tower was a Storehouse of Military Equipment up to the present day, when it is the resting place of a Collection of Royal and Historical Armours many of which are without equal in Europe, I have availed myself of the National Records and also of the generous assistance of living authorities who have made a special study of the several subjects which are dealt with in these pages.

I therefore ask Your Majesty's gracious permission to acknowledge here my indebtedness and gratitude to my predecessor Viscount Dillon, first Curator of the Armouries, who has unreservedly placed at my disposal the vast amount of notes, photographs, and researches, which he had collected during over twenty years of office. His work in connection with the Armouries will always be of the greatest value to historical students, for he undertook the care of the Collection at a time when the researches of Meyrick and Hewitt had been well-nigh forgotten and, but for his insistence on historical accuracy, these priceless National possessions would have become a mere popular exhibition of little educational value, and many would doubtless have been entirely lost to us through the ignorance of their custodians. I would also offer my thanks to Lord Dartmouth, for the loan of his Inventory of the Armouries from which the frontispiece is taken ; to Lord Monson, for the portrait of his ancestor Sir Thomas Monson ; to Sir Guy Laking, Keeper of Your Majesty's Armoury, for much valuable information respecting many of the specimens in the Collection ; to Charles Read Peers, Esq., Inspector of Ancient Monuments, for topographical details connected with the Tower ; to

the Rev. Edward Dorling, for assistance in dealing with the Heraldry displayed on many of the weapons; to E. Edwards, Esq., of the British Museum, for the translation of the Oriental inscriptions on the bronze cannon; and to A. J. Koop, Esq., of the Victoria and Albert Museum, for information connected with the Japanese armour given to James I.

Since the inception of this work, the White Tower in its entirety has been given over to the exhibition of these Historical Arms and Armours, and in the recent rearrangement of the Collection, necessitated by this expansion, I must also acknowledge the assistance I have received from Sir Lionel Earle, Secretary of Your Majesty's Office of Works; from Frank Baines, Esq., Architect in charge of Royal Palaces; from the late Sergeant-Major Buckingham, whose loss through death after over twenty years of faithful service as Foreman of the Armouries I deeply regret; from the present Foreman and Staff of the Armouries; and from the Staff of the Office of Works at the Tower.

In conclusion, I trust that this new exhibition of the Arms and Armours and the chronicles which deal with them will meet with Your Majesty's Gracious Approval. That they will be of educational value and interest to the general public is the sincere wish of

Your Majesty's Most Loyal and Devoted Subject,

CHARLES FFOULKES,

Curator of the Armouries.

24th January, 1916.

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INTRODUCTION.

IT is a matter of some difficulty to consider the history of the Armouries in the Tower of London without at the same time recapitulating needlessly the larger history of the Tower itself, which has been recorded with much interesting detail by the several writers whose names will be found in the bibliography at the end of this section of the present work. Few of these writers, however, have given more than a passing notice to the Armouries, and none has endeavoured to trace, century by century, the different buildings in which the armour and munitions of war were stored. Britton and Brayley's work gives the fullest information on this score, but it should be remembered that these authors were chronicling the Tower as a whole, and the Armouries, therefore, would be only a detail of their wider investigations.

Although the present collection is smaller, in point of numbers, than the other national Armouries of Europe, it possesses a unique interest in that it has undoubtedly been stored in the Tower, in part at any rate, from the early years of the sixteenth century. It may be that some of the specimens now surviving were here many years previous to this, for we have in the Public Record Office an Inventory taken in 1455 by John Stanley, Sergeant of the Armoury under Henry VI; but from the vague descriptions of the several items in this list it is impossible to say whether any of these pieces are in existence.¹ Next in seniority as an established Armoury comes the Dresden Iohanneum, founded in 1586, and the Real Armeria, Madrid, built by Philip II during the last years of the same century; all the other important national collections are displayed in comparatively modern buildings. For nearly four hundred years, therefore—at the lowest computation—the precincts of the Tower have sheltered many pieces of this collection—added to from time to time, neglected at one period, wrongly described by romantic enthusiasts later on, and, at the beginning of the nineteenth century, given some semblance of historical accuracy by Sir Samuel Meyrick.

Historical students and antiquaries in general can but faintly realise the work that Meyrick accomplished in his studies and researches in this direction. Absurd and misleading traditions, kept alive by ignorant historians, careless artists and an uneducated public, had relegated armour and weapons to the lumber-room; the Public Records were stored, with no system or classification, in the White Tower, and no attempt had been

Given in full in Hewitt's *The Tower*, 1841, and in Meyrick's *Antient Armour*, Vol. II.

made to explain the technical descriptions of earlier writers. It is true that in 1786 Grose made a most useful beginning in his *Military Antiquities*, but it is to Meyrick that we owe the real foundation of the interest in the arms and armour of our forefathers. At the same time Meyrick was seriously hampered in his investigations because of the state of the Records which, with the exception of Rymer's celebrated *Foedera*, were not made convenient for study till the invaluable series of Calendars were commenced in the year 1856 under the editorship of J. S. Brewer, Mary Everett Green, Gairdner and their many distinguished successors. Another reason which must have influenced Meyrick's judgment to some extent was that he was himself a collector of arms and armour, and would, therefore, naturally attribute the highest value and provenance to specimens of which he possessed similar examples. After Meyrick's published researches the subject received increased attention from the antiquary and the general public, already interested in mediæval subjects by the writings of Sir Walter Scott. With this a demand sprung up for armour which was exploited to the fullest extent by unscrupulous forgers who flooded Europe, and especially England, with shameless imitations, in which the practical utility of the piece was ignored and the rust of centuries was clumsily fabricated with chemicals. To the new enthusiast it must have been a difficult matter to refuse a "genuine thirteenth century helm," offered secretly, at a comparatively low figure. But it must have been more difficult still after its purchase to acknowledge its falsity. The Tower collection contains certain specimens of this kind, on which serious papers have been published, and these go to prove that the enthusiasm of Meyrick and his followers was not always accompanied by sound judgment and practical investigation. At the same time, all honour must be ascribed to him for his untiring labours, which have formed the foundation of all literary work on arms and armour, both in this country and also in Europe. Meyrick produced his work on *Ancient Armour* in 1824, but Hewitt, whose smaller and more convenient book was published in 1840,¹ never mentions his name, although he had absorbed all Meyrick's important researches.

In 1827 Sir Samuel (then Dr.) Meyrick was invited by the Duke of Wellington, Constable of the Tower, to rearrange the Armouries, which were in a state of wild anachronistic confusion, and later on in 1869, J. R. Planché, Somerset Herald, and John Hewitt made further alterations in the disposition of the armour. Planché had earnestly petitioned the War Office to install a custodian of the collection, who should be a connoisseur in such matters and not a mere storekeeper; but his suggestions were ignored till, in the year 1895, Viscount Dillon, who had minutely studied every piece in the collection for many years, was appointed first Curator of the Armouries, and, by his untiring labours and careful

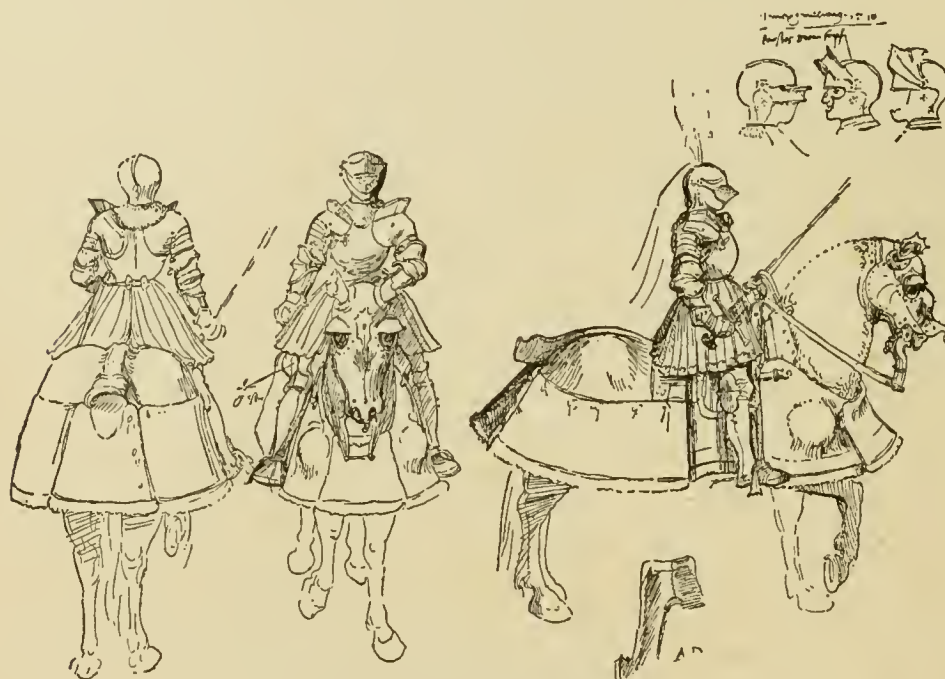
¹ J. Hewitt, *Ancient Armour*, three volumes.

historical researches among the Public Records and other historical documents, placed the final correct attribution upon the more important pieces. New records may come to light which may give further information on this score, but Lord Dillon's work, taken with the earlier investigations of Meyrick, will always be the basis upon which the provenance of these pieces will be founded.

The most valuable documentary evidence which Lord Dillon discovered in connection with the armour in the Tower is the *Armourers' Album*, which is now in the Art Library of the Victoria and Albert Museum. In the year 1723 the book was exhibited to the Society of Antiquaries by Mr. Vertue, and in 1790 it was in the possession of the Duchess of Portland (daughter of Harley Earl of Oxford). One of the illustrations, the armour of Robert Dudley Earl of Leicester, was engraved by Pennant in his *London*, and the armour of George Clifford Earl of Cumberland was engraved in Strutt's *Costumes*, 1799. About the year 1890 Baron de Cosson, the learned connoisseur of arms and armour, found this album in the possession of M. Stein, who had acquired it at the Spitzer sale, and, on Lord Dillon's representations to the Board of Education, the volume was purchased for the library of the Victoria and Albert Museum. It consists of thirty-one pages, 17in. by 11½in., drawn in ink and coloured in water-colour, showing suits of armour and extra pieces for the tilt made for certain nobles and gentlemen during the reign of Queen Elizabeth. Some of the sheets are signed "Jacobe," and all are marked with the name of the owner of the armour depicted. By means of this valuable record Lord Dillon was able to give an assured provenance to the suits in the Tower Armouries of Robert Dudley Earl of Leicester (II. 81), William Somerset Earl of Worcester (II. 83), Sir John Smythe (II. 84) and the helmet of Sir Henry Lee (IV. 43). The present writer has added to these Roger, Baron North (II. 82). The identity of Jacobe will be found noted in the Index of Armourers. The volume was reproduced in part by Messrs. Griggs, with a preface by Lord Dillon under the title of *An Almain Armourer's Album*, in 1903, and was described by the same author in the *Archæological Journal*, Vol. LI.

It is a somewhat curious fact that in spite of the lavish expenditure indulged in by kings and princes for arms and armour, and of the truly magnificent productions of the armourer's craft which they collected all over Europe, but few English portraits have come down to us in which the armour can be recognised as existing at the present day. Henry VIII is never represented in armour except in the coloured sketch (*Brit. Mus. Cott. MS. Augustus 3*), in the wall painting of the siege of Boulogne, formerly at Cowdray, engraved by the Society of Antiquaries, and in the picture at Hampton Court showing his meeting with Maximilian at Terouanne. Charles I was certainly painted in armour by Vandyck, but the suit is a plain one, and is not the gilt suit in the Armouries.

A drawing in the Gallery of Engravings at Berlin, showing the Emperor Maximilian armed and mounted, is of exceptional interest, in that the main lines of the armour for man and horse are those of the "Engraved suit" in the Tower. This is especially noticeable in the case of the horse armour, of which the crupper is very long and the peytral is distinguished by swelling bosses, both peculiarities of the Engraved bard. The fact that the page is dated 1510 suggests that the drawing represented an existing



DRAWING OF MAXIMILIAN.

(Gallery of Engravings, Berlin; dated 1510).

suit belonging to the Emperor, which was evidently used as a model for his present to Henry VIII made by Conrad Seusenhofer between the years 1511 and 1514. One of the armets in the upper margin is of very similar type to that of the "Engraved suit." The signature "A. D." was considered by Boeheim¹ to be that of Durer, but this attribution has been rejected by Lippman.

The two portraits given on the following page show Robert Dudley Earl of Leicester wearing part of the suit now shown in the Armouries (II. 81), and William Somerset Earl of Worcester, also wearing armour in this collection (II. 83), the designs for which appear in the *Armourers' Album* above noticed. The portraits of George Clifford Earl of Cumberland at Appleby, at Montague House, in Sir Henry Howorth's collection, in the

¹ Wendelin Boeheim, *Meister der Waffenschmiedkunst*.



Plated Armour: (early XVIth century) II.2.

Bodleian Library and elsewhere, show armour decorated with stars, which approximates very nearly to the portions of a suit now in the Armouries (II. 85).

Unfortunately, there are no such records in England as the invaluable illustrated *Inventory of Charles V*, by which the ownership of many of the important armours in the Madrid Collection has been incontrovertibly established, and our investigations on such points must be guided almost entirely by the general description given of each piece in the several Surveys, by scattered entries in the Collections of State Papers and by tradition. It is true that the *Armourers' Album*, above referred to, has been of incalculable value in determining



WILLIAM SOMERSET, Third Earl of Worcester, K.G.
(From the Duke of Beaufort's Collection).



ROBERT DUDLEY, Earl of Leicester, K.G.
(From The Duke of Sutherland's Collection).

the history of certain suits made for some of the courtiers of Elizabeth, but, with this exception, there are few pictorial records which are of any practical assistance. The unique "Engraved suit" of Henry VIII exemplifies this in the best possible manner. In this we have a piece of craftsmanship of the finest order, presented by one sovereign to another, and marked by a wealth of decoration

such as is found on few existing suits ; yet it is tersely described in the Surveys as “ sent by His Majesty the Emperor,” and no details are given of its peculiarities. Again, the “ Lion suit,” which stands out as a masterpiece of metalwork, even though it be but indifferent armour, is never described in any detail by the guide books from the year 1708 up to the time when Meyrick produced his monumental work on armour. We have in the Record Office a letter recording a gift of armour in 1613 from Charles Emmanuel of Savoy to Henry Prince of Wales or to his brother Charles,¹ which, from the minute account of the other presents and from their nature, is more than probably this suit ; but we have not even an entry in the Surveys subsequent to this date that any such armour was ever included in the Royal Collection.

With regard to the other armours of Henry VIII we can be only guided by tradition, and by the fact that two of the suits² are of such large girth that only Henry himself, or possibly Charles Brandon, could ever have required them. The suit known as that “ Rough from the Hammer ”³ is handed down to us entirely on traditional evidence. At the present day there is no sign that it is rough from the hammer, for the surface is “ glazed ” and all tool marks are removed. At the same time, its construction is so peculiar that it is certain that it has been scheduled from Survey to Survey with an undoubted pedigree. The same may be said of Charles Brandon’s lance,⁴ which from its unusual size could never have been confused with any other weapon.

The extracts from Surveys and Inventories given in the present work, with some of the more important pieces in the Collection, have only been included after careful and minute investigation, and till they have been indubitably controverted these will stand as the historical records of such pieces.

Another example of the confused nomenclature of certain pieces in the Collection is to be found in the two suits,⁵ one of which has been scheduled as “ Sent to His now Majesty Charles II by the Great Mogul.” It is noticed in *Mercurius Politicus Redivivus*, an extract from which is given on page 44, and is scheduled in the Inventories from 1660 onwards. The other armour is described by Hewitt as coming from the Royal Armoury of Segovia, but the former of these attributions may be at once dismissed as absurd. It is improbable in the extreme that the Great Mogul should have sent Japanese and not Indian armour to Charles, and it could not have come from Japan in this reign,

¹ II. 89—Prince Henry died on November 6, 1612, at the age of eighteen, but the armour was not sent till July, 1613. It was probably intended for him, as Charles was only thirteen years old at this time.

² II. 8, 9.

³ II. 6—The measurements of Henry VIII’s armours are of interest as showing the different periods of his life at which they were worn : II. 5—Waist, 35in. ; calf, 16½in. ; ankle, 10½in. II. 6—Waist, 38in. ; calf, 18in. ; ankle, 10in. II. 8—Waist, 54in. ; calf, 21in. ; ankle, 13½in.

⁴ VII. 550, ⁵ II. 127, 128.

as that country was entirely closed to Europeans. At the same time, two armours were certainly sent to James I by the Emperor of Japan, Iyeyasu in 1611, when Captain Saris was negotiating for concessions on behalf of the East India Company.¹ It is impossible to say how the confusion can have arisen, but it may be that one of these pieces, not being considered to be of great value by Charles I, was given to Prince Charles as a plaything, and that in course of time, and in the confusion caused by the Civil War, the fact of its Japanese origin was forgotten, and it was classed with all other Oriental objects as Indian. This is hardly to be wondered at when we find Hewitt and Meyrick describing one of them as Indian armour in 1845, and raising no serious doubt as to the legend that the other had been worn by the Moors of Granada.²

With regard to the instruments of punishment and torture with which romantic journalism has from time to time filled the Tower, we have the same difficulties to contend with. The block is certainly that which was used for the execution of Simon Lord Lovat in 1747. These grim relics were generally destroyed after the execution, but this appears to have passed into the possession of one of the officials of the Record Office, which was at that time housed in the Tower. The heading axe is nearly a hundred years older, for it is scheduled in the Surveys as far back as 1687. Another axe blade of much the same type, dredged up from the Thames in 1829, was probably used for the same purpose. The collar of torment, to which a filling of lead has been added at a recent date, appears in the Survey of 1675 as "A Collar of Torture taken from the Spanish Armada," but it is more than probable that it is the same contrivance which is entered in the Survey of 1547 as "stele colr for a prysoner." This ends the list of instruments of punishment of which there are any authentic data, unless we may include the thumb-screws and bilboes. The thumb-screws are mentioned by Hughson in 1805,³ but there is no evidence forthcoming as to when these came into the Collection. Hewitt in his *Catalogue* of 1870 states that the "Scavenger's Daughter," or "Cravat," was purchased from Denew in 1826, but this must be an error, as it is engraved in Skinner's *History of London*, published in 1795. The realistic and quite unpractical model of the Rack, which has delighted countless numbers of visitors, was made by one of the Armoury staff in the last century, based upon the well known woodcuts in *Foxe's Book of Martyrs*. The Rack is scheduled in the Inventory of 1676⁴ and there certainly was a rack, or a portion of it, preserved in the Tower in 1805, for it is figured, with a detailed account, in Steevens and Read's *Shakespeare*, Vol. VI, under *Measure for Measure*. In spite of this fact, however, it is not noticed in *Newbery's Guide Books* from the year 1744 onwards, and it must certainly

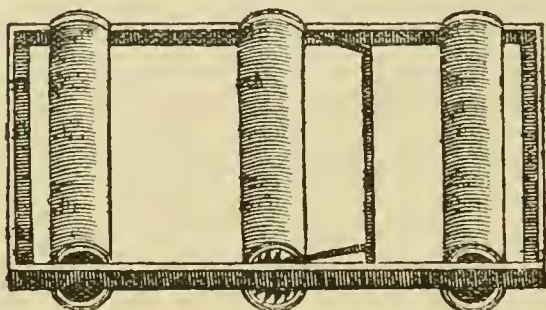
¹ J. Harris, *Navigantium atque Itinerantium Bibliotheca*, Vol. I, Lib. II, Cap. XXIII.

² J. Hewitt, *The Tower*, 1841—1845.

³ *Description of the British Metropolis*.

⁴ In the Valuation of 1693 the "Rack for Torment" is valued at £1 0s. 0d.

have been destroyed or its authenticity must have been denied by the year 1827, when Meyrick rearranged the Collection, for he makes no mention of it. From the engraving of this relic it is comparatively easy to see how it was used, but it certainly differs fundamentally from the usually accepted design as given by Foxe. Howell (*Londinopolis*, 1657) writes: "In the Tower is the Brake or Rack usually called the Duke of Exceter's Daughter because he was the first Inventor of it."¹ This statement is copied in



REMAINS OF THE RACK.

(From Steeven's & Reed's *Shakespeare*, 1805).

Burton's *New View of London and Westminster*, published in 1730, and in 1763 we find in the *Foreigners' Guide to London* (English and French) that the Grand Storehouse contained "a Rack to extort confessions, not used in England." Again, in 1766 Lerouge mentions, in his *Curiosités de Londres*, "une torture d'une singulière invention mais en ne s'en sert point." In Blackstone's *Commentaries*, 1791, Vol. IV, 326, the Rack is mentioned as

being then in the Tower, and this statement is repeated in the edition of 1854, but is evidently unverified, as the remains of this instrument had certainly disappeared by that date. From the above extracts, therefore, we may gather that the remains of the Rack were shown in the Grand Storehouse between the years 1657 and 1807. Possibly it was destroyed in the fire of 1841.

Before leaving this subject of the authenticity of certain specimens in the Collections it may be as well, once and for all, to dispose of the popular but historically valueless figure of Queen Elizabeth. The first reference to this figure is to be found in *Newbery's Guide* of 1778, where it is described as being shown with attendant pages, in a tent the curtains of which drew up like the drop scene of the theatre. The background was at first painted to represent Tilbury Fort, and afterwards the scene was changed to St. Paul's Cathedral.² In the early guide books the Queen is stated to be "superbly dressed in the armour which she had on at the review at Tilbury."³ Meyrick,⁴ when he rearranged the Armouries in 1827, pointed out that this armour was a garderein of the early sixteenth century put on upside down, and that the breastplate, which was added at a later period, was of very inferior late sixteenth century workmanship. From the Armoury Records we learn that a new dress was ordered for the Queen's figure in 1827, and the dress of the page was purchased in 1828. In 1847 a new dress and wig were

¹ John Holland Duke of Exeter, Constable of the Tower 1420 (Coke's *Institutes*, III, 35).

² *History and Antiquities of London*, Allen, 1827, Vol. II; *People's History of the Tower*, 1841.

³ *Historical Description of the Tower of London*, Carnan, 1788.

⁴ *Antient Armour*, Vol. III.

asked for, and again in 1872 another new dress was purchased by the Board of Ordnance. When the contents of the Spanish Armoury were moved into the crypt beneath St. John's Chapel in the White Tower the figure of Queen Elizabeth was moved also. In 1885 the figure was moved again to the eastern end of the large room on the upper floor of the White Tower, and about the year 1894 it was moved again to the floor beneath on the southern side. When the Coronation robes of His late Majesty King Edward VII and of Queen Alexandra were deposited in the White Tower on this floor in 1907 Queen Elizabeth was moved again to the crypt, where she had formerly been shown. It is not, perhaps, a question that deserves to be discussed at such length, but the popular tradition which still clings to this effigy is so strong that it is but right that it should be shown to have no historical foundation whatever, and to have no place with the other valuable specimens in the Collection.¹

At the beginning of the eighteenth century, when armour had been practically discarded, those pieces which remained in the Tower were naturally exhibited as curious relics of a barbarous past, and thus the Armouries became the first national museum where curiosities of all sorts were shown which had no connection with the military history of the nation. We find that between the years 1771 and 1795 a loom, invented by Sir Thomas Lombe in 1742, was one of the important items in the Collection,² and in the year 1805 a collection of shell grottoes representing palaces, mosques, pagodas and flowers, made by "A Lady and her Daughter," was exhibited in the Bloody Tower.³

These details are of but little importance as compared with the unique armours now shown in the White Tower, but it is of some interest to trace the history of the Collection as an exhibition, and to show how, by the ignorance and carelessness of its former custodians, many impossible traditions were accepted which, under the cold light of documentary evidence, must, at the present day, be controverted.

After the reign of Charles II the chief interest in the Armoury Records lies in the issues of armour for ceremonial purposes. As will be seen in the tabulated extracts given on pages 52-56, these issues were made for State funerals, Lord Mayors' Shows, to private individuals and to the Kings' Champions at the Coronations. Among the issues to individuals are records of the loan or gift of "Silk Armour." These defences consisted of headpiece, breast, back and culet of padded cotton, sometimes reinforced with steel busks and covered with silk. They are mentioned by Roger North in his *Examen*, published in 1740, as being used by the "Green Ribbon Club" as a protection "against the time when the Protestants were to be massacred." Grose figures a set of this nature in

¹ See XVII. 19.

² *History of London*, R. Skinner, 1795.

Description of the Metropolis, D. Hughson, 1805.

his *Antient Armour*, and two complete defences, with traces of the original silk covering, were formerly in the Ashmolean, and are now in the Pitt-Rivers Collection at Oxford. When we consider the carelessness with which armour was treated at the beginning of the nineteenth century, when valuable pieces were thrown aside or sold for old iron, as described by Lord Dillon in speaking of Sir Henry Lee's armour at Ditchley,¹ we can hardly be surprised to find that suits of armour up to the number of twenty-six, with large numbers of weapons, were lent for the Lord Mayor's Show. It is quite superfluous to add that these were seriously injured on such occasions, for they were worn by ignorant and careless theatrical supers, to whom much of the damage done to these historical specimens is doubtless due.

With regard to the armour used by the Champions at the more recent Coronations, it is only with the accession of James II that we find issues from the Armouries for this purpose. Up to this date the Champion would probably use his own personal armour. If he borrowed Royal property we have no trace of issues of this nature anterior to 1685.

Among the War Office Papers in the Record Office are certain *Delivery Books*, which give some information as to these details, but, from careful scrutiny and comparison of other records, they are found to be so carelessly worded as to be of little use in determining what actual armour was issued on each occasion.

At the Coronation of James II it is stated that the armour of Edward III was issued. Grose in his *Antient Armour* (II, Plate 25) shows this figure, which also appears, with less detail, in Rowlandson and Pugin's aquatint of the Armouries.² The suit was made up of one of Henry VIII's armours (II. 9), which was formerly ascribed to Charles Brandon Duke of Suffolk, with for headpiece an open burgonet of the seventeenth century. This armour was returned to store, and was issued again to the Champion for the Coronation of William and Mary in 1689. From a note made by the storekeeper in the Delivery Book, which is undated, but which is certainly prior to 1738, it appears that on the latter occasion this suit was kept as a perquisite by the Champion, and was used again at the Coronation of Anne. At the same time, if the suit issued originally was that which Grose attributed to Edward III, the armour must have been returned to store and redeemed at a price at some period, as it forms part of the present collection. This seems likely to have been the case, for in 1714 the Champion of George I does not appear to have had armour of his own, and received what is described as a "white and parcel gilt suit of Charles II." Meyrick, writing in 1824, states that this suit, before his rearrangement of the Armouries,³ was the russetted armour decorated with embossed lions' masks (II. 89), which can by no stretch of official terminology be described

¹ *Archæological Journal*, Vol. LI.

² Ackerman's *Microcosm of London*, 1809.

³ *Antient Armour*, III, 1824.

as white and gold. There was some bitter correspondence over the return of this suit and the pistols which were specially bought to go with it, and in the following year Mr. Lewis Dymoke claimed the armour as his perquisite. This was refused on account of its historical value, and a redemption fee was paid to the Champion. He appears, however, to have retained a gorget, though not that which belongs to the suit as it is now shown, for in Messrs. Christie's catalogue of 1877 the gorget which was sold by one of the Dymoke family as part of the Hatton suit (Windsor Collection, 808) is scheduled as being "of later date and used by the Champion at the Coronation of George I, when it was selected from the Royal Armoury and retained for his customary fee." The Delivery Books in the Record Office (W.O. 55/1656) show that the same armour was issued for the Coronation of George II in 1727, and the Armoury Guide Books of the period state that this was "the Armour of Charles II." Hewitt, in his *Catalogue* of 1859, states that the armour now known to be that of Sir John Smythe, made by Jacobe,¹ was used at this Coronation, but he gives no authority for his statement, which has been copied in every succeeding guide to the Armouries.

The Armoury Records between the years 1739 and 1855 are, unfortunately, missing. They were probably destroyed previous to the removal of the Record Office from the Tower to Chancery Lane. From an undated catalogue of "the Royal Armoury," a commercial venture, and in no way an official exhibition, in the Haymarket, a fluted suit of the early part of the sixteenth century is described as having been provided by the proprietor and worn at the Coronation of George IV. It is stated that this originally belonged to the King of Bavaria, who presented it to Napoleon. A lithograph of the Champion in this armour, drawn by Abraham Cooper, R.A., was published by Colnaghi on July 24, 1821. The horse used on this occasion was "Cato," from Astley's Circus.

In the section of the present work devoted to Extracts from Public and other Records it will be seen that armour for decorative purposes was frequently sent from the Tower to Windsor. The gilt suit of Charles I appears as the only armour mentioned in the Inventory of the Royal possessions taken by Cromwell in 1649, but it is uncertain whether this was at Windsor at the time of the arrest and trial of the King. From the year 1686 onwards large numbers of pieces, either complete suits or portions of suits, were transferred to Windsor, and among these is found the same gilt suit which had evidently been in the Tower at the Restoration, for it is included in the Inventory made by Colonel Legge dated 1660. This suit was returned to the Tower in the same year.² In 1855 certain armours at Windsor were ordered to be returned to the Tower, but no details are

¹ II. 84.

² Record Office, W.O. 55/1656.

given of the pieces thus transferred. In 1901 certain pieces of no great historical value were sent from the Tower to Windsor to decorate the guardroom, and in 1914 a more important transfer took place. By command of His Majesty the armour of Henry VIII (II. 9) and certain other pieces were sent from the Tower, and in exchange His Majesty was graciously pleased to transfer several pieces of another suit of Henry VIII, which remains in the Tower (II. 8), of the armours of William Somerset Earl of Worcester, of Sir John Smythe and of Charles I when prince. The return of these pieces is of the utmost value to the Collection, especially in the case of the armour of Sir John Smythe, for it exemplifies the often-ignored fact that a "suit" was not merely the armour that covered a man on one occasion, but that it included a large number of extra pieces for reinforcing at the joust, for various forms of combat on horse or on foot, or for war alone. It is uncertain when these pieces were taken to Windsor. They were either part of the issue in 1686, given on page 53, or they were part of a transfer made under the Prince Regent, of which no details are obtainable at the present day. From the point of view of public interest their return and exhibition, with the suits to which they belong, are of great historical value for which all those who study the subject of defensive armour must be deeply grateful to His Majesty and to Sir Guy Laking, the King's Armourer, who assisted in arranging the transfer.

It has been noted above that annual issues of arms and armour were made to the Lord Mayor for processional purposes up to a very recent date, and this, from the civic importance of the Lord Mayor's Show, is, perhaps, hardly surprising when we consider the neglect of the Armouries during the early years of the nineteenth century. The "men in armour" had been such a feature of the show that he would have been a brave official in those days who would have dared to discontinue the loan. But it is, indeed, surprising to find that in the year 1727 Colley Cibber obtained the loan of armour from the Tower for the play of "Henry V" at Drury Lane. Apparently this loan was not held to have created a precedent, for there are no further records of armour being lent for such a purpose again.

It should be remembered that the Tower was originally simply a storehouse for munitions of war, and that it is only the lapse of time and historical associations which have distinguished certain pieces in the Collection as valuable specimens of the craft of the armourer. In addition to these pieces there is still a large amount of ordinary armour, such as would be served out to the rank and file of the army between about the years 1590 and 1650, together with certain obsolete weapons of even later date; and it is these items which from time to time have been issued, when occasion demanded, as the limited space available for display in the White Tower precluded their exhibition with the more historically important pieces.

From about the year 1860 onwards issues and transfers were made from these large stores of seventeenth century armour and weapons to certain



Armour. (middle of XVIth century.) II. A.

museums, fortresses and other Government buildings for decorative purposes. Among these are found many examples of "Maltese" armour, that is decorated late sixteenth century armour of North Italian origin, which was brought from Malta in the year 1826. For many years receipts for these issues were signed annually by the recipients, but after a time the transfers were in some cases—as, for example, those of the Rotunda Museum, Woolwich, of the Royal United Service Museum and of certain other buildings—made absolute. It should be remembered that up to the year 1904 both the Tower Armouries and all the above buildings and institutions were either wholly or in part under the control of the War Office, and such transfers were effected without much complication or difficulty. It was only on the assumption of the control of the Tower Armouries by the Office of Works that some definite division of these military remains became needed. As time goes on these arms and armours become of more value and interest, their careful preservation is a matter of importance and their periodical inspection is necessary. In certain instances these collections of arms and armours have been placed under the control of the Office of Works, and are inspected by the Curator of the Armouries of the Tower.

In the year 1913 certain Regimental Colours were brought up from the cellars of the White Tower and were carefully examined. Several of these proved to be local Militia colours of regiments enrolled in 1808 and disbanded in 1816. By order of the First Commissioner of Works the colours were offered to the Lords-Lieutenant of the counties to which the regiments had belonged on the condition that they had them repaired and deposited in a church or public building. In every case this offer was accepted, the Lords-Lieutenant bearing the cost of repairs, and the colours were handed over publicly with all due honours by the Curator of the Armouries as representing the First Commissioner of Works. These colours were originally shown on the north wall of the New Horse Armoury, demolished in 1883, after which date they were used as decorations for regimental dinners and other functions. The majority of the remaining colours were those of the Foreign Legions—German, Italian and Swiss—which were enrolled in the British Army by Baron Stütterhelm in the year 1855. The words of command in these legions were given in German, and among the officers was Count Blucher, grandson of the famous Marshal. The troops were reviewed by Queen Victoria at Shorncliffe in the same year, and the colours were presented by Lord Palmerston. These, like the local Militia colours, were returned to store in the Tower after the regiments were disbanded. A few colours, so dilapidated that their provenance could not be discovered, were also found, and these, with those of the Foreign Legions, were handed over to the Royal United Service Museum, where they are now exhibited. One colour bearing the arms of the last Grand Master of the Knights of Malta, Fernando Hompesch, has been added to the Collection

shown in the White Tower, as it has been identified as having been captured from the French with the ornate bronze gun¹ in the year 1788.

Originally there was a very large store of artillery in the Tower, the more important examples being exhibited in the Grand Storehouse, which was destroyed by fire in the year 1841, together with many valuable pieces of ordnance. Under this heading, as was also the case with the arms and armour, many transfers and issues have taken place since the beginning of the nineteenth century.

The Repository at Woolwich, in which large numbers of Service guns were kept, and in which certain early examples were exhibited, was destroyed by fire in the year 1802, and about the year 1805 many pieces were sent from the Tower, apparently to replace those that had been lost or damaged. It is difficult to trace these transfers in the official records of the time, as the entries are very meagre and no details are given. In a guide book entitled *The Picture of London*, published in 1807, the statement is made that "many pieces of Ordnance have recently been sent to Woolwich and it is proposed to send the remainder shortly." At the urgent request of Sir Walter Scott in 1829 the great fifteenth century bombard, "Mons Meg," which had formerly been preserved in the Tower, was sent to Edinburgh Castle, where it is shown at the present time.² The Carisbrooke gun was transferred from the Tower to Carisbrooke in the year 1898.

The pieces remaining in the Tower were scattered about in different parts of the precincts, some in front of the New Horse Armoury, and many of the mortars ranged on each side of the green in front of the King's house. All these were eventually collected and shown in the Gun Park, a railed-in enclosure on the west side of the White Tower, in 1908.

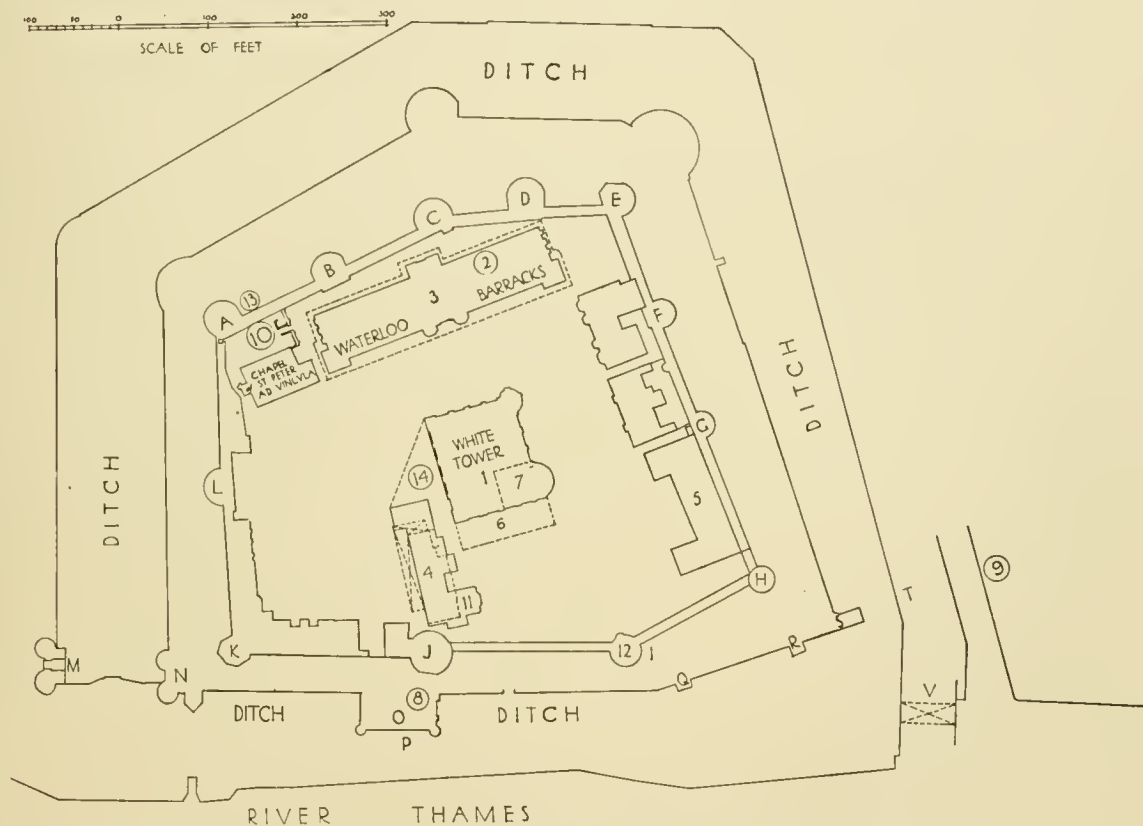
After several consultations with the Principal Architect in Charge of Historic Buildings, who has the charge of the statues of London under H.M. Office of Works, it was found that the atmosphere was having a most serious effect on the bronze guns in the Tower Gun Park, and it was decided that the early examples should be moved into the basement of the White Tower to preserve them from further injury. It was agreed on all sides that this step was in many respects a regrettable one; but it should be borne in mind that no other building, either within the Tower precincts or indeed anywhere in London, was available for their display, and as some of them are intimately connected with Henry VIII, whose armour is the outstanding feature of the Armouries, it was considered that they should on no account leave the Tower, and their removal to the basement was decided upon.

From the year 1821 up to the year 1894 purchases were made at several notable sales of armour both in England and on the Continent, particularly at the famous Bernal sale in 1855, the War Office devoting the receipts from

¹ XVI. 9.

² See page 45, sub. ann. 1754, also XIX. 148.

THE ARMOURIES IN HIS MAJESTY'S TOWER OF LONDON 1580-1915



- | | | |
|---|---|--|
| <p>A. DEVEREUX TOWER.
B. FLINT TOWER.
C. BOWYER TOWER.
D. BRICK TOWER.
E. MARTIN TOWER.
F. CONSTABLE TOWER.
G. BROAD ARROW TOWER.</p> | <p>H. SALT TOWER.
I. LANTHORN TOWER.
J. WAKEFIELD TOWER.
K. BELL TOWER.
L. BEAUCHAMP TOWER.
M. MIDDLE TOWER.
N. BYWARD TOWER.</p> | <p>O. ST. THOMAS TOWER.
P. TRAITORS' GATE.
Q. CRADLE TOWER.
R. WELL TOWER.
S. DEVELIN TOWER.
T. SITE OF IRON GATE.
V. IRON GATE.</p> |
|---|---|--|

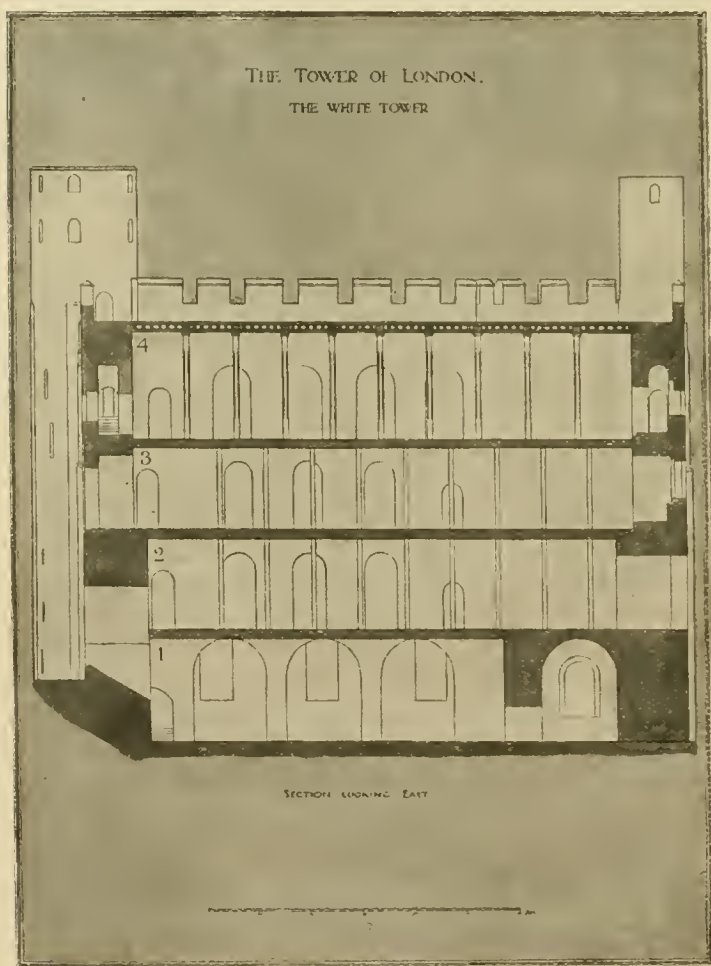
- | | |
|---|--|
| <p>1. ARMOURIES. Circ. 1580
2. " 1883-Present Day
3. GRAND STOREHOUSE. Circ. 1690-1841
4. SPANISH ARMOURY. Circ. 1670-1836
5. HORSE ARMOURY. Circ. 1700-1827
6. NEW HORSE ARMOURY. 1827-1883
7. QUEEN ELIZABETH'S ARMOURY. 1836-1883</p> | <p>8. SITE OF THE MILL. Circ. 1550-1846
9. ARMOURY AND ORDNANCE STORE. Circ. 1562
10. ORDNANCE OFFICE. Circ. 1600-1683
11. " " 1683-1882
12. " " 1882-Present Day
13. ARMOURY CLEANING ROOMS. 1800
14. GUN PARK. 1883-Present Day</p> |
|---|--|

admission fees to this purpose. Since the last-mentioned date no such purchases have been made, and it is unlikely that such a course will be followed in the future unless any piece of outstanding historical interest should come into the market, and even should this be the case, it is hardly probable that such could be acquired without the assistance of private generosity, owing to the excessive prices which rule at the present day.¹

With exception of the Oriental weapons deposited by the East India Company and the ordnance captured in various campaigns, few specimens have been added to the collection by gift or transfer. The large propor-

tion of munitions of war taken from Paris in 1815 were sent to the Woolwich Rotunda, and only a few examples of swords and firearms were placed in the Tower Armouries.

It has been stated at the beginning of this section of the Survey that one of the main interests in the Armouries lies in the fact that they are still preserved in their original home. It is owing, therefore, to the peculiar construction of the White Tower and the difficulties of arranging for the convenient circulation of visitors that it has been found impossible to adhere strictly to a chronological sequence in the several items of the Collection. In the year 1914 negotiations were concluded with the War Office by which the modern arms were ordered to be moved from the ground floor, or "Gun Floor," of the White Tower



SECTION OF THE WHITE TOWER.

- | | |
|---------------------------------|---------------------------------------|
| 1. Basement. | 3. First Floor or "Banqueting Hall." |
| 2. Ground Floor or "Gun Floor." | 4. Second Floor or "Council Chamber." |

to the Brass Mount, and thus the whole of the White Tower was made available for expanding the hitherto overcrowded exhibits.² The general

¹ A list of sales is given in Appendix A, page 482.

² The Transfer was completed in 1915.

scheme of arrangement at the time of writing is as follows : The Basement contains heavy ordnance. The Ground floor, or "Gun Floor," contains small ordnance, firearms and certain ordinary pieces of armour of the middle of the seventeenth century, used merely for decorative purposes. One portion of this floor is allotted to engravings, photographs, models and topographical records of the Armouries and of the Tower itself. The First floor, or "Banqueting Hall," contains swords, staff weapons and armours of the same period as those of the floor beneath. The Second floor, or "Council Chamber," contains the important historical pieces of the Collection. (See plan on page 16.)

Before Lord Dillon was appointed Curator, the cleaning of the armour, especially of the more valuable gilt and engraved pieces, was marked by an energy coupled with artistic and technical ignorance which has well-nigh ruined several magnificent specimens of the armourer's craft. The armours of Henry VIII, of William Earl of Worcester, of Lord North and of Robert Dudley Earl of Leicester, have been despoiled of most of their gilding and russetting by constant contact with bath brick and emery cloth, a deplorable fact which makes the identification of some of the pieces mentioned in former Inventories almost impossible. For the last five-and-twenty years such ill-advised methods have been rigorously excluded, but even the constant careful wiping, which is necessary owing to the accumulations of dust and the attacks from the river fogs, must in time have some effect on the decoration, and this has made it necessary to exhibit those pieces which still retain traces of gilding and ornament in cases. The tradition of the "Horse Armoury" has been retained in the large room on the upper floor, but in the same room the ornate parade armours have been protected by glass, and it is to be hoped that by this means their present condition will be maintained for many years to come.

In 1913-14 the whole question of the contents of the Armouries was reviewed, and H.M. First Commissioner of Works appointed the present Curator and Mr. Charles Reed Peers, F.S.A., Inspector of Ancient Monuments, to confer with Sir Hercules Read as to the advisability of transferring the Prehistoric, Greek, Roman and early British weapons, together with the whole Oriental section of the Armouries, to the British Museum. It was decided that as all the early European specimens had been acquired by purchase, and as the Oriental section had little definite connection with the Tower or the historical development of the British Army, no useful purpose would be served by retaining them in the Tower, where the space was urgently needed for showing the armour and later weapons. His Majesty's consent was obtained on 16th November, 1914, and the transfer was made on 26th November of the same year.

THE ARMOURIES.

FROM the first years of the reign of Henry VIII up to about the year 1580 the Royal armour was stored at Greenwich, in the Tower, and a few pieces at Hampton Court, Windsor and Westminster, the workshops being at Greenwich, where Henry established his "Almain Armourers" about the year 1514. In doing this he was evidently fired with ambition to emulate his friend, the Emperor Maximilian, who had devoted much time and study to the manufacture of armour. From certain Surveys and Inventories taken in the seventeenth century we learn



PART OF THE PEDIMENT OF THE GRAND STOREHOUSE NOW ERECTED NEAR THE EAST
END OF THE WATERLOO BARRACKS.

that the principal rooms at Greenwich allotted to the manufacture and display of armour were the Green Gallery, the Great Chamber, Mr. Pickering's¹ workhouse, the Cutting house, the Locksmith's office and the Staff house, probably a store for lances and staff weapons. The armour appears to have been all removed by Mr. Annesley² to the Tower during the Interregnum, and on the restoration of Charles II we find the contents of the Tower described by Colonel Legge, Master of the Armouries, as "formerly at Greenwich being (within tyme of the late distraccions and unhappy differences in this kingedome) removed unto the said Tower."³

¹ Master workman 1604-1614, Master of the Armourers' Company 1608-1609.

² Clerk of the Armouries 1630-1650.

³ Lord Dartmouth's Collection. Survey of 1660.

Although the Inventories from the year 1455 onwards schedule armour as being in the Tower of London, we have no actual reference to the buildings in which it was housed till the year 1580, when the Commissioners of the Armouries were ordered to make estimates for fitting up rooms in the White Tower for hanging up all the armour (*State Papers, Domestic, Elizabeth, CXLI, 42*). From Platter's *Journal*, referred to on page 66, we find that in 1599 this had been done, and the more valuable specimens were shown in the White, or "Cæsar's," Tower.

In the perspective drawing by Haiward and Gascoyne, dated 1597, engraved and published by the Society of Antiquaries in *Vetusta Monumenta*, Vol. IV, there is no indication of the site of the Armouries. We may, therefore, gather that they were by this time situated in the White Tower. In the year 1623 James I ordered a survey of the Tower to be made by Sir Richard Moryson and Sir John Kaynes, Surveyors of the Ordnance, together with Sir Allen Apsley, Lieutenant of the Tower, but no specific reference is made here to the Armouries. In the same volume of manuscripts, however, we find a document,¹ compiled by William Franklyn, sometime Yeoman Warder, and dated March 16, 1641, which gives the names of all the towers and prison lodgings which go to make up the Tower of London. Among these is the following entry: "Brick Tower.²—By the Armory, the Mr. of the Ordnance lodging." There is no plan of the Tower of this date, and the nearest is that drawn by John Ogilby in 1673, in which the Brick Tower is shown as being incorporated in the Magazines which stretched along the north



MILL AT THE TRAITOR'S GATE.
(Hughson's *Description of the Metropolis*, 1805).

¹ Brit. Mus. Harl. MS., 1326.

² The Brick Tower was handed back to the Armouries for a store and workshop in June, 1914.

wall. It is probable, therefore, that the Armouries were located, in part at any rate, in these buildings.

After this date there are no topographical records of interest in this direction till we come to the year 1708, when John Nicholson published his *New View of London*. As the matter contained in this and in other guide books of a later date is somewhat confusing, and in some respects misleading, the Armouries will be considered under the headings of the different buildings in which they were stored from time to time. The sketch map on page 15 shows clearly the various removals which have taken place, extracted from maps and plans in the possession of H.M. Office of Works from the year 1717 onwards.

It will be noticed that among the extracts from the State Papers given on page 45, under the year 1559, mention is made of the Great Mill of Mr. Brooke. From a careful examination of plans, records and other evidence it appears to be certain that the only outlet and inlet between the moat and the river was at the Traitor's Gate. This mill existed up to the year 1843, at which date the moat was drained and the mill demolished, but the pumping engine which had been installed for filling the cistern on the White Tower in the eighteenth century remained in use for some twenty years longer.¹ The mill is engraved in J. T. Smith's *Antiquities of London* (1791-8), and in David Hughson's *Description of the Metropolis*, Vol. III (1805). As water power was needed for polishing or glazing armour it is probable that Brooke's mill was used for this purpose towards the end of the sixteenth century, but there is no evidence extant to show at what date it was first installed. (See illustration on preceding page.)

THE GRAND STOREHOUSE OR SMALL ARMOURY.

This building, which occupied the site now covered by the Waterloo Barracks to the north of the White Tower, was commenced in the reign of James II. The dates of its inception and completion are not known, and no reference to it is found among the Domestic State Papers preserved in the Record Office. It cannot have been very far advanced at the end of the reign of James II, for it does not appear in the perspective plan drawn for Lord Dartmouth, Master of the Ordnance, between the years 1681 and 1689. It is generally considered that only the ground floor was built in this reign, and that the building was completed in the reign of William and Mary. According to Maitland (*History of London*, Vol. I, p. 163) its completion was celebrated by a banquet, at which the King and Queen attended in State, and were waited on by the labourers and warrant workmen of the Tower, wearing white gloves and aprons, the badges of

¹ This cistern was 60ft. by 9ft. by 7ft. deep, and contained when full 22,680 gallons, or about 100 tons, of water.



Armour of King Henry VIII., II. 5.

Freemasonry. This must have been prior to 1694, the year in which the Queen died. If this is a historical fact, it is strange that such a minute diarist as Luttrell in his *Brief Relation of State Affairs* makes no mention of it. He merely records a visit of the King to view the Storehouse on February 13, 1691-2.

Although described by contemporary writers as "a noble edifice," the Storehouse was not distinguished in any way architecturally. It was a plain two-storeyed building, 345ft. by 60ft., surmounted by a turret, and



THE GRAND STOREHOUSE.

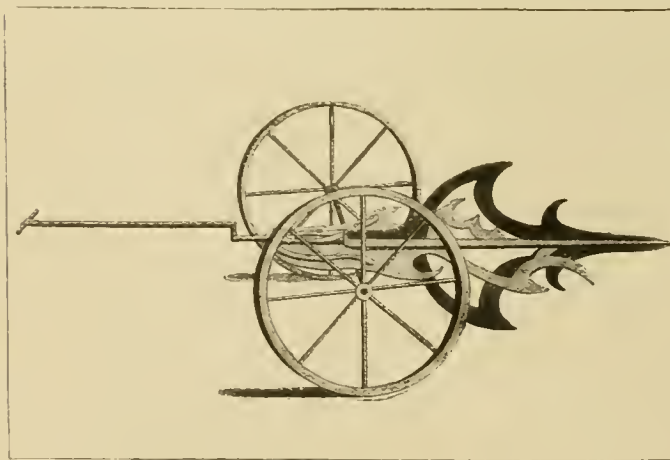
(From a Drawing in the Armouries.)

enriched with carved trophies of arms and other decorations, erroneously attributed by later writers to Grinling Gibbons. The carving which decorated the pediment, reproduced on page 18, is now built into a wall between the barracks and the Martin Tower. Entered by folding doors near the east of St. Peter's Church, the visitor was first shown the ground floor, on which was stored the Train of Artillery ready for active service, and also historical pieces of ordnance. Many of the early bronze pieces were destroyed in the fire of 1841, but, fortunately, a few of these and some of the iron cannon have been spared to us. One of the most interesting exhibits which perished was a large cannon of wood, scheduled in the Inventory of 1676 as "a wooden gunne mounted on a shipp carriage."

According to the guide books this was called the gun "Policy,"¹ and was said to have been made for Henry VIII to overawe the French at the siege of Boulogne in 1544. Lord Dillon, in one of his valuable papers on military subjects,² notes that precisely such a gun was shown on the painting of the siege formerly at Cowdray House, which was engraved for the Society of Antiquaries shortly before the house was destroyed by fire. That the legend was an early one we know from the fact that it is recorded by Hentzner in his description of the Tower in 1598.

Among the other interesting relics which perished in the fire were the wheel of the *Victory*; the drum-major's carriage, with kettle-drums and harness for four horses; the Cohorn, an instrument for throwing thirty bombs; and the chevaux-de-frise, or Lyonois, which is figured in Grose's *Military Antiquities*.

The first floor, in which were stored large numbers of Service weapons, was called the Small Armoury, and was celebrated for the extraordinary collection of trophies and fantasies formed of obsolete arms, which, according to the guide books, baffled all description. These decorations were contrived by one Harris, a gunsmith, who made similar decorations for Hampton Court and Whitehall, and received a pension for his ingenuity.



THE LYONNOIS.
(From Grose's *Military Antiquities*.)



WOODEN GUN AT THE SIEGE OF
BOULOGNE, 1544.

(From a Wall Painting formerly in Cowdray House.)

They included the Witch of Endor, an organ, Medusa's head, a pair of gates, the backbone of a whale, waves of the sea, fans, crescents, pillars and stars made from swords, bayonets, pistols, gunlocks and staff weapons. In the present Armouries there are several feeble modern imitations of these trophies, most of which in course of time will be removed as being inconsistent with the historical nature of the Collection. In the year 1744

¹ The inscription on this gun was "Quod opus est Marte cui Minerva non desit" (*vide* the Student of Altdorf's *Journal*, given on page 68).

² *Archæological Journal*, LXV.

the Small Armoury contained arms and accoutrements for 80,000 men, "sixteen chests of 12,000 muskets each," and figures in armour representing Henry V and Henry VI, which, according to the guide book of 1821, were supplemented by others of John and Henry III, described by Meyrick as in sixteenth and seventeenth century armour.¹ The top floor was used for storing tents and other military stores. On the Grand Staircase, which led up from the ground floor to the Armoury, a tablet was set up recording that "This Armoury was honoured by the presence of Their Majesties King William IV and Queen Adelaide on the 5th of August, 1830."²

On the night of October 30, 1841, the Grand Storehouse was destroyed by a fire which originated in the Bowyer Tower, at that time used as an armourers' shop, the armourers, of course, being gunsmiths, repairers and cleaners. The flames spread with great rapidity down each side of the building, and it was only the abundance of water, due to the providential accident of a high tide filling the river and the moat, and the direction of the wind, which saved the White Tower from the conflagration. In a few hours the Storehouse was in ruins, and the contents either completely destroyed or seriously damaged. Many historical pieces of bronze ordnance were melted, but, fortunately, a few of these and the earlier specimens of iron were saved. The loss of Service weapons was enormous. Upwards of 26,000 bayonets, 22,000 flint locks, 7,000 percussion locks, 12,000 percussion muskets, large quantities of belts, slings and pouches were completely destroyed, together with all the obsolete arms which made up the fantastic decorations for which the Small Armoury was celebrated. In all it was estimated that over 100,000 stands of arms were lost or rendered entirely useless, the cost of which, including the building and stores, was computed at over a quarter of a million pounds. Besides certain masses of fused metal exhibited at the present time in the Armouries, several pieces of ordnance bear traces of the fire.

It was fortunate that the loss was not even greater, for in 1830 over 600,000 percussion muskets were kept in the Storehouse, and up to the year 1825 many historical suits of armour were shown in the same building. These latter had, however, been moved to the New Horse Armoury, which was opened in 1827. The Tower was closed to the public for five weeks, and, when re-opened, relics of the fire were sold in one of the storehouses at prices from sixpence to fifteen shillings.³

¹ *Antient Armour*, III, 111.

² Ned Ward in *The London Spy*, 1753, states that the staircase was guarded by life-size figures of Grenadiers cut out in board and painted. Noorthouck in his *History of London, Westminster and Southwark* describes certain transparencies in the Small Armoury which had been used in the fireworks at the celebration of the Peace of 1748.

³ Knight's *London*, 1842, II, 263.

THE HORSE ARMOURIES.

In Hatton's *New View of London*, published in 1708, the Horse Armoury is described as "a little Ed. from the Ordnance Office." This may either mean that the armour was at this time kept in the Spanish Armoury, near the Ordnance Office in Cold Harbour, or it may simply be a careless way of describing the building now known as "C store," which is used for the mobilisation stores of the Scots Guards. All the later guide books up to 1820 mention this as the Horse Armouries, so it is probable that Hatton refers to the same building. It is uncertain at what date precisely these mounted suits of armour were placed here, but it is probable that on the completion of the Grand Storehouse in the early part of the reign of William and Mary there was a general sorting out and some



THE HORSE ARMOURIES.

(By Rowlandson & Pugin, *Microcosm of London*, 1809).

attempt at systematic arrangement of the whole Collection. In none of the plans previous to the year 1717 is any locality specifically marked as the Armouries, and it is not till the year 1726, when Captain Lempriere drew up his Survey of the Tower, that we find the Horse Armouries shown in the site above referred to.

The ground floor of this building, in which naval weapons and stores were kept, was known as the Sea Stores; the first floor was the Horse Armoury and the top floor had the comprehensive title of "Petty Emptions."

In the Horse Armoury were set out a series of mounted figures, which represented the Kings of England from William the Conqueror to George II arrayed in a most wonderful mixture of armours of the sixteenth and seventeenth centuries. According to Meyrick,¹ who saw the Collection in the early years of the nineteenth century, the principal figures were set out as follows, the numbers in parentheses being those of the present catalogue :

1. William the Conqueror—White armour of the time of Edward VI. (II. 40)
2. Edward I—A suit of blue steel, with gilt slashings of the same date. (II. 83 ?)
3. Edward III—White armour of the time of Henry VIII. (II. 9)
4. Henry IV—White armour of the time of Edward VI.
5. Henry V—White armour, partly sixteenth and partly seventeenth century.
- 6, 7. Henry VI and Edward IV—
The same type of armour as Henry V.
8. Edward V—A boy's suit.
9. Henry VII—The "Engraved suit" of Henry VIII. (II. 5)
10. Henry VIII—His own proper armour. (II. 8)
11. Edward VI—Engraved and gilt armour with Scriptural subjects. (II. 88)
12. James I—Armour decorated with the Bear and Ragged Staff. (II. 81)
13. Charles I—His own proper armour. (II. 91)
14. Charles II—Armour with embossed lions' masks. (II. 89)



(From an Engraving, source unknown.)

¹ *Antient Armour*, 1824, Vol. III.

15. William III—A suit of black and gold armour of the time of Edward VI.¹
16. George I—A white suit of the time of Henry VIII.
17. George II—A suit of the time of Henry VIII, ornamented with gilding.

Kings John, Henry III, Henry V and Henry VI were all in seventeenth century cuirassier armour, and carried "flamberge" swords of the same period. Charles Brandon and Will Somers were in similar armour, the latter wearing Henry VIII's "mask helmet" (IV. 21), and Queen Elizabeth wore over her dress a "garde-rein" from the fluted suit (II. 2), put on upside down. Most of these figures were mounted on Oriental saddles with "Turkey bridles." The interior of the Horse Armoury was drawn by Rowlandson and Pugin for the *Microcosm of London* in 1809.

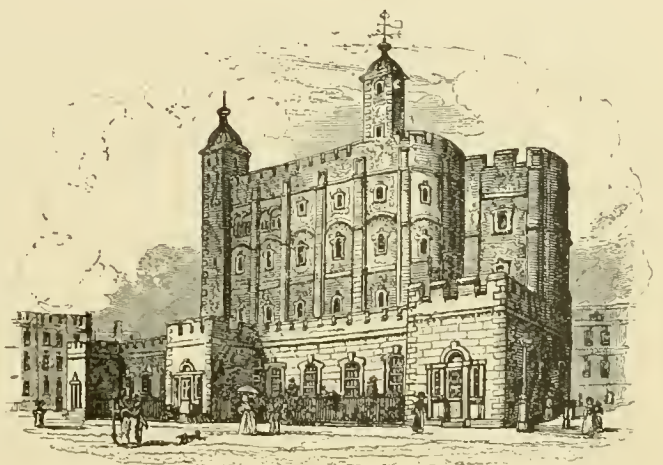
In 1686 the wooden head of Charles I and the horse upon which his armour was mounted were carved by Grinling Gibbons, together with those for Charles II. These names are marked on the heads which still are shown in the Armouries. The head of Charles II was, however, allotted to the armour of James II (II. 123), as there is no armour of Charles II in the collection. Other kings' heads and horses were carved by William Morgan, John Nort, Thomas Quillans and Marmaduke Townson in 1688, by John Nort in 1690 and the head of William III was carved by Alcock in 1702.² The horses at this period were mounted on castors, probably for convenience in moving and cleaning. The guide books of the period state that these wheeled horses were used for practising tilting and running at the ring, and this legend has been considered to be one of those picturesque fables invented by the guides of the eighteenth and nineteenth century to interest visitors. But, like the legend of the wooden guns mentioned on page 22, it will be found upon examination that there was a very definite foundation for the story. In the years 1672 and 1673 John Wells and Raphael Folyart took out patents for movable mechanical horses for use in practising for the joust and running at the ring, and, although the horses used for the display of armour in the Collection could in no way be considered to be of this nature, it is quite probable that there were mechanical contrivances in the Tower, and that from these the legend sprang into being. The records in the Patent Office give no details of the construction of these machines.

Hewitt in his *Guide to the Armouries*, published in December, 1841, states that the armour in the New Horse Armouries was moved from the

¹ Probably a painted cuirassier suit of the seventeenth century.

² Grose, *Military Antiquities*, II, 284. *Vide* also Class XVII.

old buildings adjoining the eastern wall of the White Tower. Whether they had been previously removed from the building now known as "C Store" to the ground floor of the eastern annexe to the White Tower, the upper floors of which were used for drawing-rooms of the Ordnance, or whether Hewitt refers to the "C Store," it is impossible to say. Certainly one plan in the possession of the Office of Works shows Armouries in the eastern annexe to the White Tower, but as it is undated it is of no great use for reference, and may have only been a suggested site. The annexe was demolished in 1885. As none of the early guide books gives the exact position of the Horse Armouries it is impossible to tell whether such a removal took place, but it is probable that nothing was done between the years 1726 and 1825. That armour was stored in several other buildings of the Tower we learn from Bayley,¹ who states that in 1826 armour, some of which had come from Malta, was kept in the basement of the Bowyer Tower.



NEW HORSE ARMOURY.

(From Britton & Brayley's *Memoirs of the Tower*, 1830.)

THE NEW HORSE ARMOURY.

In 1825 the New Horse Armoury was built against the south wall of the White Tower from plans by Mr. Wright, Clerk of the Works. There had been a building on this site as early as 1726, at which date Lemprière marked it on his plan as a carriage shed. The exterior was of the quasi-mediæval type, similar to that of the present Waterloo Barracks, with battlements and turrets at the corners, evidently intended to be in keeping with the architecture of the White Tower. Thomas Allen, in his *History and Antiquities of London*, published in 1827, writes: "It cannot be regretted too much that Government should have allowed a paltry building like that containing the New Horse Armoury to have been erected against the venerable and noble White Tower . . . surely there were other places to have been built upon without defacing the most perfect specimen of Norman architecture in the Kingdom." The interior, 150ft. by 33ft., was treated in similar fashion, probably inspired by Meyrick, who had

¹ *Tower of London*.



PART OF THE NEW HORSE ARMOURY, circa 1880.
(From a Photograph.)

Henry Lee, George Duke of Buckingham and Thomas Wentworth Earl of Strafford, with no definite authority for so doing: Banners were hung above each figure with the title—real or fictitious—of the owner of the armour, and the walls were embellished with heraldic colours and devices. Meyrick's labours at the Armouries were very rightly commemorated by a tablet bearing the following inscription :

Georgio IV. Opt. Max. Regnante
Arthure Duce Wellington
Ordinationum Magistro
Has Principum Nobiliumque
Loricas
Historice Instituit.

A.D. 1826 S. R. Meyrick, LL.D.

This tablet appears to have been destroyed when the New Horse Armoury

decorated his own armoury at Goodrich Court, Herefordshire, on the same lines. The windows of the Horse Armoury at the Tower were filled with glass taken from the house of Horace Walpole at Strawberry Hill, and these, after the demolition of the Armoury, were removed to St. John's Chapel in the White Tower, where they are at the present day.

On the suggestion of the Duke of Wellington, Constable of the Tower, Dr. Samuel Meyrick was invited to arrange the armour in the new building, and this work he carried out, gratuitously, as well as the historical knowledge of the period allowed. Although he had severely criticised the former anachronistic attributions in the Armouries, he labelled suits under his new arrangement as belonging to Henry VI, Edward IV, Sir Horace Vere, Edward VI, Sir



SIR SAMUEL RUSH MEYRICK,
K.H., D.C.L., F.S.A.
(From a Painting by H. P. Briggs, R.A.)



Armour of King Henry VIII., II.5.

was demolished in 1883. The trophy work, composed of sword blades, trigger-guards, etc., both here and in the White Tower, where the Service small arms were stored, was arranged by Mr. Stacey, the storekeeper.¹ As an example of the difficulty of collecting evidence with regard to the Armoury buildings in the Tower it may be noted that a very popular London guide book, published in the year 1900, still described the Horse Armouries as occupying the building which had been demolished in 1883. After this date the Collection was removed to the rooms which it now occupies in the White Tower. Sir Samuel Rush Meyrick received the Hanoverian Order, and was knighted in the year 1832.

THE SPANISH ARMOURY.

The earliest mention of this Armoury is to be found in an Inventory made in the year 1676-7,² where it is called the "Spanish Weopen House," and in a similar Inventory of 1683³ it is called the "Rich Weapon Office." It is called the "Spanish Armoury" in a bill for mending the windows in 1675.

Popular tradition held that it contained spoils of the Spanish Armada, but it is uncertain when this first received official sanction. It is noteworthy that Hentzner, visiting the Tower in 1598, only ten years after the victory over the Spaniards, makes no mention of such an exhibition, which would surely at that time have been one of the chief attractions of the Tower; nor does M. Jorevin de Rocheford mention such a building in 1672. So we may suppose that it was called by this name about the years 1673-4. It is hardly likely that there were many items from the spoils of the Armada preserved, for a large amount of foreign armour, presumably of Spanish origin, was disposed of in 1588 to provide prize-money for the victors whom their Queen had treated with such scant generosity. Although the name is not used in any of the Surveys of the reign of Charles I, the tradition of the Spanish origin of some of the weapons must have been of some standing, for we find in 1649 a warrant for "Six halberts partizans and bucklers taken from the Spaniards in 1588."⁴ According to a plan in the possession of H.M. Office of Works, dated 1730, the building was situate to the south-west of the White Tower, on the site formerly called Cold Harbour, occupied at the present day by the Main Guard, adjoining the Jewel House and Bloody Tower. No mention is made of the Spanish Armoury in the guide books till the year 1753, from which we may gather that it was not shown to the public till that date. At one time it contained the wooden gun "Policy," which has been referred to before, Henry VIII's

¹ *Gentleman's Magazine*, 1829.

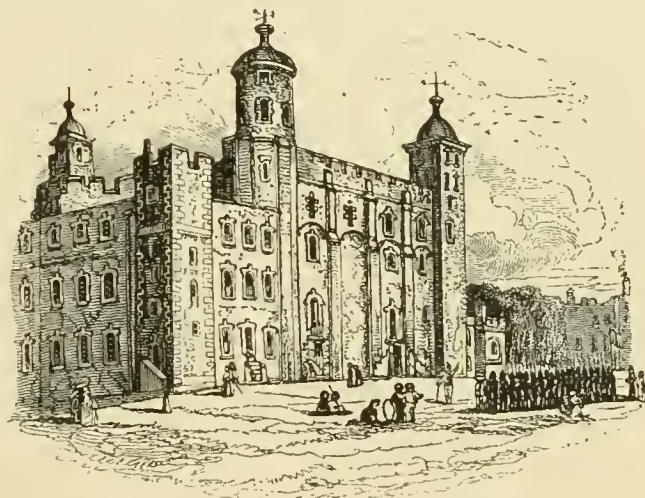
² Record Office, W.O. 55/1709.

³ Record Office, W.O. 55/1722.

⁴ Record Office, S. P. Dom., Interreg. Councils of State I, 62/10.

walking staff (XIV. 1), the axe and block, the collar of torture, the "Spanish General's Banner," a leather covered shield (V. 3) and the "Spanish General's Shield" (V. 53). It was rebuilt in 1827, and was decorated with a Sun in Splendour, on which were inscribed the names of Drake, Hawkins, Frobisher and Howard of Effingham. An equestrian figure of Queen Elizabeth, with her pages, reviewing the troops at Tilbury was the principal feature of this Armoury. The authenticity of this group has been discussed on page 8.

When the contents of the old Spanish Armoury were moved into the crypt of the White Tower in 1831 the architectural authorities embellished the walls of the crypt with plaster chevron mouldings and other unnecessary adornments to impress the visitor, and, apparently, to provide as apposite a setting to the exhibits as Meyrick had designed for those of the Horse Armouries.¹ The crypt was entered from the New Horse Armoury through a vestibule in the annexe to the White Tower, and so through a doorway, now walled up, on the south-west corner.² The only pictorial records of the contents of the old Spanish Armoury are to be found in Skinner's *History of London*, published in 1795; E. Barnard's *History of England*, 1791; and Thornton's *London and Westminster*, 1794, in all of which works the same plate is reproduced. (See page 30.)



THE WHITE TOWER FROM THE NORTH
Showing the Annexe in which the Oriental Arms were shown,
1831-1883.

(From Britton & Brayley's *Memoirs of the Tower*.)

In the year 1827 there were altogether six Armouries within the precincts of the Tower. These were the Spanish Armoury, the Small Armoury and Grand Train of Artillery in the Grand Storehouse, the Horse Armoury and the Volunteer and Sea Service Armouries on the ground and first floors of the White Tower.

THE WHITE TOWER.

Although primarily a Royal Residence, the White Tower has also been used as a storehouse for arms and armour from the earliest times. From the entry found among the State Papers Domestic under the year 1580, given on page 46, it will be seen that it was decided to "hang up all the

¹ This Armoury was afterwards called "Queen Elizabeth's Armoury."

² The annexe is generally considered to date from the fifteenth century. It was demolished in 1885.



"QUEEN ELIZABETH'S ARMOURY" 1831-1883
in the Crypt of St. John's Chapel.
(From a Lithograph)

armour" here at this date, and on referring to Platter's *Journal*, quoted on page 66, we find that this had been accomplished by the year 1599. After the Storehouse had been built, and the obsolete arms and armour had been moved into the Horse Armoury and elsewhere, the White Tower was used solely for the storage of Service weapons.

As has been previously stated, the New Horse Armoury inaugurated by Meyrick in 1827 was demolished in 1883, and by the following year its contents had been arranged in the upper floor, or Council Chamber, of the White Tower, in which were also exhibited the arms and other historical relics which had been previously shown in the crypt of St. John's Chapel under the title of Queen Elizabeth's Armoury. The skylights in the roof were made under the direction of Mr. Lysons

of the Record Office, which occupied part of the upper floor, in 1811. About the year 1865, when the Records were moved to Chancery Lane, openings were cut in the floor of the upper room known as the Council Chamber to admit more light to the lower room,¹ and these were protected by railings, which were formed of brass-hilted swords of the Land Transport Corps of the Crimean period, and beneath them a border of horse-pistols. These were, no doubt, very suitable when the contents of this room consisted solely of modern Service weapons; but since the rooms are now used for exhibiting arms and armour of a much earlier date, the incongruous decorations have been removed with great advantage to the general appearance of the Armoury.

On January 24, 1885, at 2 p.m., a bomb exploded in the Banqueting Hall, or first floor, of the White Tower. The day was Saturday, and the Tower full of visitors. The perpetrator of the outrage had endeavoured to place his machine in the office on the floor above, where its effect in a confined space would probably have been disastrous to the Tower itself. Fortunately, the door was locked, and he left the bomb in a more exposed

¹ The openings were filled up in 1916.

place. As it happened, no serious damage was done, and few people were in the immediate vicinity of the explosion. Mr. Barber, the Armoury Keeper, sent down to the front gate and, in spite of the objections of the police, had the gates closed. The criminal was arrested, and was eventually condemned to fourteen years' penal servitude.¹

About the year 1895 the small arms were removed from the second floor, or Banqueting Hall, and the contents of the upper floor, which had been inconveniently crowded together, were spread over the two floors and arranged by Viscount Dillon, the first Curator of the Armouries. There was still a store of Service arms on the first or gun-floor of the White Tower, and these could only be viewed by special permission of the Governor. In the year 1914 the War Office agreed to transfer these arms to a place outside the White Tower, as it was pointed out that the use of oil in large quantities for cleaning the rifles constituted a



EAST ROOM, SECOND FLOOR OF THE WHITE TOWER, circ. 1870.

(From a Photograph.)



"GUN FLOOR," WHITE TOWER.

(From a Coloured Print, circ. 1830.)

¹ See page 57.

serious danger to the Armouries above in case of the outbreak of fire. On the completion of the transfer in 1915 this floor was devoted to the exhibition of arms and armour, thus allowing of a better and less congested display of these historical specimens. In 1916 the Curator's Office, which had formerly been a partitioned space in the South passage on the top floor of the White Tower, was moved into the Clock Tower, Flamsteed's original observatory.

THE ORDNANCE OFFICE.

The Office of the Ordnance was at first situated near St. Peter's Chapel. In the List of Towers, given by Yeoman Warder Franklyn in 1641,¹ we find the following localities scheduled :

Brick Tower—By the Armory ; the M^r of the Ordn'ce lodging.

Two London Towers—Behinde the Ordn'ce Office.

Office of the Ordn'ce Tower—By the Chapel.

The "Two London Towers" were the Flint and Bowyer Towers and the Office of the Ordnance was located in the Devereux Tower, which was demolished and rebuilt in 1796. In the early part of the nineteenth century the Devereux Tower was used by the Ordnance Department for the cleaning or furbishing of arms. According to a Survey taken between the years 1531—1533, the Brick Tower was the lodging of the Master of the Ordnance, so we may be certain that this Tower was used for that purpose for nearly a hundred and fifty years, if not longer.

Between the years 1683 and 1685 the Office of the Ordnance was moved from its former site to a new building to the south of the White Tower, near that part of the precincts called Cold Harbour. This is definitely shown on Lord Dartmouth's plan, made about the year 1689, and reproduced in *Vetusta Monumenta*, Vol. IV. In the year 1778 this building and the Lanthorn Tower were burnt and a new office was erected on the site which remained standing till the year 1882, when it was demolished and the Ordnance Office was installed in the Lanthorn Tower, a new building on the site of the original tower. Allen² states that the Ordnance Office was to the north-east of the White Tower in the year 1827, but this must have been only a temporary arrangement, as Britton and Brayley,³ writing in 1830, describe the office as being to the south-west.

The arms of the Ordnance were removed from the old building, and were built into the wall on the south side of "C Store," near the Salt Tower. In the year 1914 the Brick Tower, which up to the middle of the seventeenth century had been an appurtenance of the Master of the Ordnance, was transferred from the control of the Colonel commanding the Garrison to that of His Majesty's Office of Works as a workshop and store for the Armouries.

¹ Brit. Mus. Harl. MS., 1326, 93 *et seq.*

² *History and Antiquities of London.*

³ *Memoirs of the Tower of London.*

In 1599 the fee for seeing the Tower and the Armouries was twenty-one shillings,¹ in 1660 the fees amounted to thirty-three shillings,² and in 1771 the fees were for the Foot Armoury, or Small Armoury, and the Horse Armoury sixpence each, and for the Train of Artillery and Spanish Armoury fourpence each, taken together one shilling and eightpence per person. Half these fees were charged if a party was made up. In 1821 the price of admission was two shillings per person, and this included the Sea Armoury in the White Tower, and in 1830 the fee for the Armouries alone was three shillings. In 1838 the fee was reduced to one shilling, but visitors could only be shown the Armouries in parties, which were conducted round by a warder every half-hour. In 1840 the inclusive fee was reduced to sixpence, at which price it stands at the present day. None of the above fees included the Jewel House, which, being outside of the present consideration, has not been noticed. According to the Parliamentary Returns of the year 1841 the following tables were compiled to show the increase of popular patronage due to the reduction of fees :



ARMS OF THE ORDNANCE.

(Removed from the old Ordnance Office and erected on the South Wall of "C Store.")

		<i>Admission.</i>		<i>Visitors.</i>		<i>Revenue.</i>
1837-8	..	2s. and fee	..	10,500	..	£1,050
1838-9	..	1s.	..	41,000	..	£2,050
1839-40	..	6d.	..	80,000	..	£2,000
1840-1	..	6d.	..	91,897	..	£2,297

In the year 1875 the public were first admitted free to all those parts of the Tower to which access is permitted, including the Jewel House, on Mondays, Saturdays, and Official Holidays.

In 1914 the numbers of visitors were :

<i>By payment.</i>	<i>Free.</i>	<i>Total.</i>
369,158	133,059	502,217

¹ See page 66.² Diary of General Patrick Gordon, page 85.

EXTRACTS FROM HISTORICAL DOCUMENTS DEALING
WITH THE ARMOURIES AND WITH THE MAKING OF
ARMOUR, Etc.

ALTHOUGH these are chiefly concerned with the Armouries of the Tower of London, the records of those of Greenwich and elsewhere have been included, as they are intimately connected with the Collection of Arms and Armour which is now exhibited in the White Tower.

Certain small items for payments and other details of an unimportant nature have been omitted, and these may be found in the several Calendars of State Papers Domestic. The Inventories, which are quoted in the body of the present work, will be found under a separate heading on page 74. Unless otherwise stated, the following extracts are taken from documents in the Public Record Office. Those marked (*) are given more fully in *The Armourer and His Craft*, by the present author.

The extracts given below are placed under the headings General, Buildings, Expenses, Issues.

GENERAL.

- 1339, May 1. Warrant to John de Flete, Keeper of the Armoury at the Tower to send springalds and crossbows to Southampton.¹

(Rymer's *Foedera*, Rec. Edit. II, ii. 1080.)

- 1373, August 17. Order to arrest Geoffrey de Kent, tailor, for stealing the King's Armour taken from the Tower.

(Close Rolls, Edw. III, 1373, memb. 15, d.)

1398. Privy Seal ordering the Treasurer and Chamberlain to deliver the Armour of the Duke of Gloucester and of the Earls of Arundel and Warwick to the Keeper of the King's Armoury in the Tower of London.

(Cal. and Inv. of the Exchequer, 334/27.)

- 1430, February 16. Commission to John Orell, one of the Sergeants of the Armoury to arrest and take Armourers and Fourbours (furbishers) for his office.

(Rot. Pat. Hen. VI, 1430, memb. 34, d.)

¹ For the expedition to France before the Battle of Sluys.

1511, May 10. Sir Robert Wingfield,¹ writing to Henry VIII from Innsbruck, says: "Jerningham has departed hence and hath sett all your harness . . . also that harness² which the Emperor doth [send to your] grace." The harness bespoken by Wingfield was not ready, but was promised by the armourers in three or four days.

(Brit. Mus. Cott. MS. Vitell. B. XVIII, 13.)

„ June 1. In the first place, there are two suits of armour belonging to the King of England's Embassy prepared to measure of which one is gilt and indeed altogether finished and the other I am now gilding. Secondly the armour of his Imperial Majesty is now in process of being polished and gilded. After which the armour is to be made carefully threefold with some pieces, there is still some small piece to be made.

Also there are now still five suits of armour in process of manufacture namely for the King of England for his own use one suit in every way such as "ylsings" (?) has been, together with one to be silver forged. (Letter from the Government to the Emperor.)

(Innsbruck Archives, Missiven, 1511, f. 20.)³

„ September 16. Conrad Seusenhofer receives for two suits of armour for his Imperial Majesty and one for the English Embassy 211 florins.

(Loc. cit. Raitbuch, 1511, f. 37.)

1513. Among the King's tents is mentioned: "The Gauntlet, a lodging for the Office of the Master of the Armoury."

(Exchr. T. R. Misc. Book, III, p. 143.)

1514, March 27. The Government reports to the Emperor that they have undertaken to bear the cost of sending Conrad Seusenhofer to make armour for the King of England because the King might now have need of him and it would be discreditable to the Emperor if the armour were not suitable.

(Innsbruck Archives, Missiven, 1514, f. 3.)

„ April 28. Passport for two trunks, in one the King of England's armour, in the other the equipage for the journey from Augsburg to England.

(Loc. cit. Embieten und Befelch, 1514, f. 119.)

„ May 1. Hans von Wendt, court carpenter, receives for the trunks for the King of England's armour 2 gulden 24 kreuzer.

(Loc. cit. Raitbuch, 1514, f. 101.)

¹ Ambassador to Maximilian from Henry VII, 1507, knighted 1511, Privy Councillor 1522, Ambassador to Charles V, Lieutenant, Deputy, and Mayor of Calais.

² This entry probably refers to the present of the "Engraved suit," II, 5.

³ These extracts are given in full in the *Jahrbuch des Kunsthistorischen Sammlungen des Allerhochsten Kaiserhauses*, Vol. II.

- 1514, October 13. Hans Seusenhofer receives in full payment of his journey to England with three suits of armour for the King 80 gulden.

(Loc. cit. Raitbuch, 1514, f. 101.)

„ May 7-14. Payment to “ One of the Emperor’s Servants £6 . 13 . 4.”¹

1519. In a list of armours for the joust, headed “ Revels,” mention is made of a steel bard engraved with the stories of St. George and St. Barbara² wrought by Powle,³ and also a bard wrought with Burgundy crosses and pomegranates, given by the Emperor.⁴

(S. P. Henry VIII, § 29, p. 187.)

- 1520, April. Richard Pellande, Rauffe Brand, Richard Cutler and Hans, four of the King’s armourers, were sent to Flanders to provide stuff for the meeting of the Field of the Cloth of Gold. They travelled to Calais, Bruges, Ghent, Malines, Brussels, Nieuport, Antwerp, Oudenarde, Dunkirk and back to Calais. A large wool-house was hired for the Armoury, another for the King’s armour and another for stores. The glazing mill at Greenwich was taken down and was set up at Guisnes with four forges.

(Exchr. T. R. Misc. Book, Vol. IX.)

- 1532, December 13. Carlo Capello, the Venetian, writes that Henry VIII visited the Tower daily to hasten the works then going on there and was founding cannon and having gunpowder made.”

(Sanuto Diaries, V, lvii, p. 351.)

1543. Peter Baude, a Frenchman, and Peter van Collen, both the “ Kings feedmen,” employed to cast iron ordnance of diverse sorts.⁵

(Stow’s *Annales*, p. 584.)

- 1544, June 23. Letter from Thomas Lok⁶ to Henry stating that he has bought brigandines, pauldrons, mail sleeves, etc., at Antwerp.

(S. P. Hen. VIII, 1544, § 189, f. 54.)

1546. “ About the reign of Henry VIII three brethren that were gun-founders surnamed Owens got ground there (in Houndsditch) to build upon and to enclose for casting of brass ordnance.⁷ These occupied a good part of the street on the field side.”

(Stow’s *Survey*, 1720, II. 23.)

- 1558, December 26. Account of armour remaining in the Tower.

(S. P. Dom. Eliz., I, 44.)

¹ Probably Hans Seusenhofer.

² The “ Engraved Bard,” VI, 1-5.

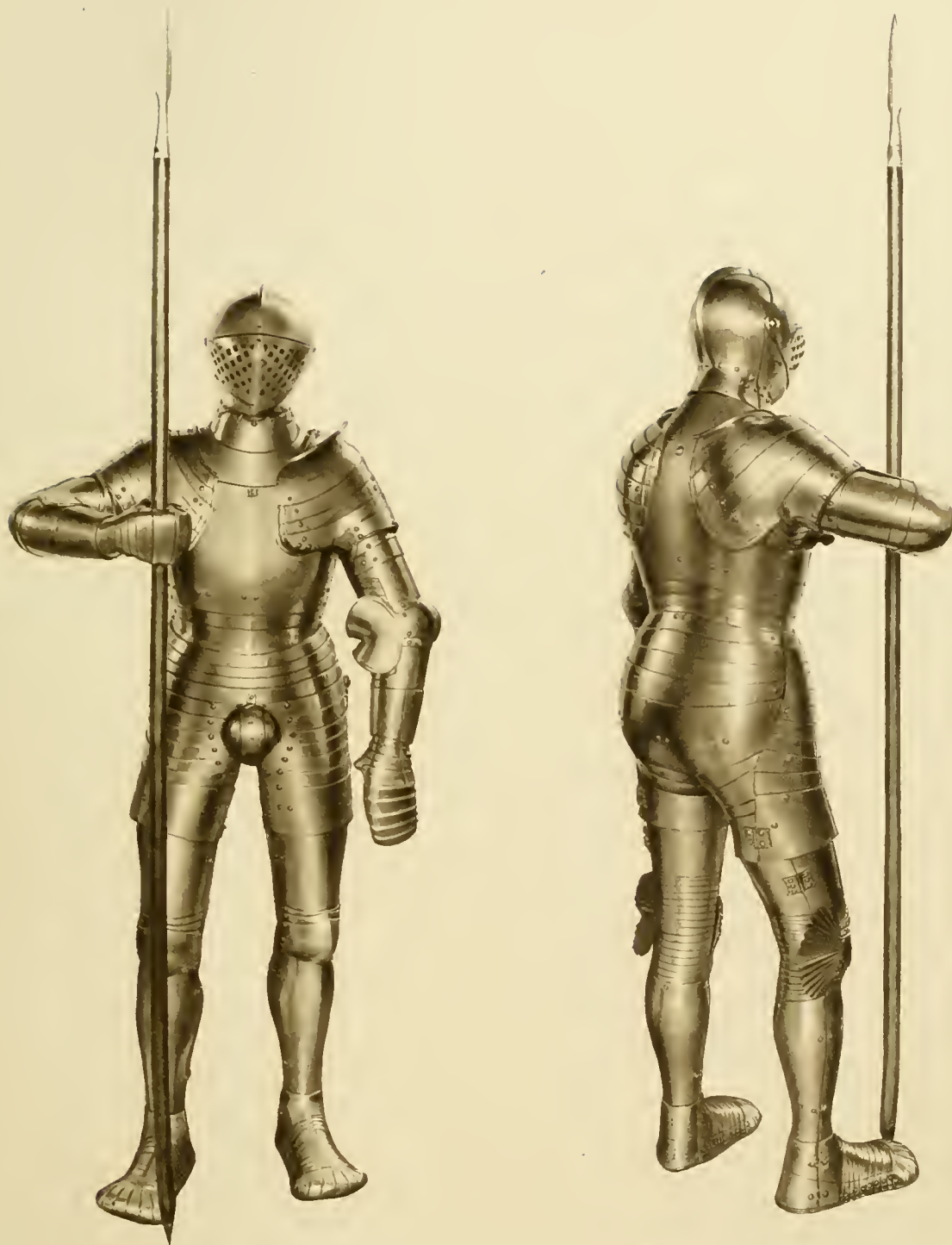
³ Paul von Vreland, also known as Paul Freeland.

⁴ The “ Burgundian Bard,” VI, 6-12.

⁵ The brass piece XIX. 17 is by the first-named craftsman.

⁶ Probably brother of Sir William Lok, Sheriff of London, 1548.

⁷ The piece XIX. 19 was cast by Robert Owen in 1546.



Armour of King Henry VIII. (for Foot Combat) II. 6.

- 1559, Sir Richard Southwell,¹ Master of the Armouries, writes to Cecil complaining that the money due to the Armouries is unpaid, and proposes a sale of corslets, etc., to meet the difficulty.
(S. P. Dom. Eliz., IV, 46.)
- „ Notes on Armour, Armourers, prices and charges of the same.
(S. P. Dom. Eliz., VIII, 1—7.)
1575. Order to Sir George Howard,² Master of the Armouries, to convert old armour into 1,500 jacks for sea services.³
(S. P. Dom. Eliz., CVI, 65.)
1585. “About the twenty-ninth year of Queen Elizabeth there was a lottery for rich and curious armour, and was begun to be drawn at London, in St. Paul’s Churchyard at the westgate, a house of timber and boards being erected for drawing day and night for the space of two or three days.”
(Stow’s *Annales*, p. 720.)
- 1588, June. Report on complete and other armours in the Tower, at Greenwich, Woolwich, Hampton Court and Windsor.
(S. P. Dom. Eliz., CCXI, 83.)
- „ July 31. Report of armour in the Tower of London by Mr. John Lee.
(S. P. Dom. Eliz., CCXIII, 78, 79.)
- „ August 1. Anonymous⁴ letter to Walsingham suggesting the re-introduction of the steel bow and crossbow as “the former flieth 20 score yards. The most powerful weapon against this enemy [the Spaniards] is the fear of God.”
(S. P. Dom. Eliz., CCXIV, 9.)
- „ August. The Earl of Leicester, writing to Sir Francis Walsingham, says that the burgonets in the Tower are so bad that no one will buy them. He suggests that the Armouries should be better cared for.
(S. P. Dom. Eliz., CCXIV, 1.)
- *1590. Petition of the Armourers’ Company of London to Elizabeth for regulating the proper making and selling of armour.
(Brit. Mus. Landsdown MS., 63/5.)
- „ October 12. Sir Henry Lee, Master of the Armouries, writing to Lord Burghley, describes a test of two cuirasses, one of Shropshire metal and the other of Innsbruck iron, made in the Armouries. The test was made by pistol shot, and was witnessed by Sir Robert Constable, John Lee, cousin to Sir Henry Lee, and Jacobe, master workman, of Greenwich.⁵ The English metal proved to be by far the inferior.
(S. P. Dom. Eliz., CCXXXIII, 92.)

^{1 2} See page 62.

³ This document contains interesting details relative to the making and cost of jacks. See also III, 44.

⁴ Possibly Sir John Smythe, who advocated the use of the bow in his *Discourses on Divers Sorts of Weapons*, 1590.

⁵ Possibly identical with Jacob who succeeded Capt. Foulkes as Keeper of the Queen’s Calivers in the Tower, 1595–1598 (Hatfield Papers VIII, 242).

1594. Proposals for the alteration of armour.

(Brit. Mus. Lansdown MS., 76/37.)

„ Considerations as to the armour in the Tower, how it is kept and how best put in order.

(S. P. Dom. Eliz., CCXLVII, 5.)

1598. Report to the Ordnance Commissioners that the arms and armour be removed to the Tower as the Woolwich Armoury is decayed and they thereby suffer embezzlement and rust.

(S. P. Dom. Eliz., CCLXVIII, 13.)

1599. William Poore's petition to encourage a secret process "to keep armour from pewtrifying, kankering, or rusting."¹

(Brit. Mus. Lansdown MS., 73/57.)

1608, March 24. Grant to Robert and William Appleby the office of making black jacks, bottles, barhides, cloth sacks, bed cases, gun cases, peternel cases, pistol cases, crossbow cases, longbow cases, bombards,² baskets, collects, bucklers, all of leather, for the Household, the Tower of London and the Navy for their lives for ever.

(S. P. Dom. Docquets, Vol. 9.)

1611. The Emperor of Japan (Iyeyasu) presents Captain John Saris,³ the agent of the East India Company, with two suits of Japan armour, finely varnished, together with a letter to the King of England.⁴

(J. Harris, *Itinerantium Bibliotheca*, Vol. I, Lib. II, cap. XXIII, p. 127.)

1613. July 1. Giovanni Biondi writes to Carleton⁵ that the Ambassador Extraordinary of Savoy (Marquis de Villa) presented the Queen with a casket of rock crystal supported by eight lions, and to the Prince a suit of Milanese armour richly decorated after the model of those made for Charles V and Francis I, and to the King a lynx, a lioness and a tiger.⁶

(S. P. Dom. Jac. I, LXXIV, 22.)

1617, July 1. Privilege to John Cooper Wolfen and John Miller for twenty-one years to have the sole making of certain oil to keep armour from rust and canker.

(Patent Office No. 4.)

1618, January 11. Privilege to Thomas Murray for twenty-one years for a new invention for the making of sword blades, falchions, skeynes and rapier blades.

(Patent Office No. 5.)

¹ No details are given of this process.

² Leather bottles.

³ Merchant and factor of the East India Company at Bantam, 1605-9; obtained concessions in Japan 1611-13, returned to England and was accused of dishonesty in these arrangements September 14, 1614.

⁴ See II, 127.

⁵ Sir Dudley Carleton, Viscount Dorchester (1573-1632), Ambassador to Venice, the Hague and Paris.

⁶ See II, 89.

*1618, March 15. Undertaking of the Armourers' Company of London to make certain armours every six months and the prices of the same.

(Records of the Armourers' Company.)

*1619, February 4. Proclamation against the excessive use of gold and silver foliate, which is to be confined to armour and ensigns of honour.

(S. P. Dom. Jac. I, CV, 79.)

1621. Abstract of the differences of prices of arms in England and in Amsterdam, and the quantities procured.

(S. P. Dom. Jac. I, CXX, 47.)

1625. Warrant to Sir William Cope, Master of the Armouries to deliver to Visct. Valentia 700 armours, consisting of back, breast, gorget and headpieces, for furnishing a land army of 10,000 soldiers.

(S. P. Dom. Docquets, Vol. 13.)

1626. Roger Falkenor¹ asks for an enquiry into the state of the Armoury and the number of men employed.

„ Note of armour made at Greenwich, and the names of the persons for whom it was made.²

„ Petition of the armourers of the King's Armoury at Greenwich to the Commission of the Ordnance and Armoury.

(S. P. Dom. Car. I, XIII, 96.)

„ Petition of Thos. Pitt, founder of brass ordnance to the King, for additional allowances.

(S. P. Dom. Car. I, XIII, 97.)

1627, February 15. Report of George Earl of Totnes³ on the petition of Roger Falkenor. He advises that John Cooper, Keeper of the King's Brigandines, which did not then exist, should surrender his patent and be made Surveyor of the Armoury. Approved by the King.

„ Cooper refuses to surrender unless his arrears of 10d. per day for eighteen months are paid.

(S. P. Dom. Car. I, LIV, 1.)

1628. Commission to survey the Ordnance and Armoury of the Tower.

(S. P. Dom. Car. I, XCIII, 19, 20.)

¹ Made sundry petitions for the better organisation of the Armouries.

² Duke of Buckingham, Marquis of Hamilton, Earl of Dorset, Earl of Oxford, Lord Garret, Lord Compton, Earl of Desmond, Lord Mansfeelde, Lord Monjoy, Earl of Bedford, Lord Stanhope, Lord Bruse, Lord Gourdon, Sir Henry Mildmay, Mr. Carye, Sir William Hayden, the Master of the Armoury, Sir William Pitt, Sir Arnold Harbert, Sir Adam Newton, Baron of Burford, Marquis of Hamilton, Earl of Northampton.

³ George Carew (1559-1629); commanded troops in Ireland 1579-80, knighted 1586, Master of Ordnance in Ireland 1588-92, Lieutenant-General of Ordnance in England 1592, went with expedition to Cadiz 1596, envoy to France 1598, M.P. for Hastings, created Baron Carew of Clopton 1605, Master-General of Ordnance 1608-17, created Earl of Totnes 1626.

1628. Captain John Heydon¹ sends a list of charges agreed upon with the armourers to William Boswell, Clerk of the Council. The charges include the cutting of corslets and the russetting of armour.

(S. P. Dom. Car. I, XCIII, 61.)

1629. Petition of John Medley of Poictiers as to the making, stamping and cleaning of armour in the Armouries. The allowance for cleaning the armour in the Tower is £400 per annum.

(S. P. Dom. Car. I, CXLVI, 44.)

- „ Sir Thomas Jay,² Master of the Armouries, replies to a petition of John Medley, and states that he has £400 allowed for keeping up the Armouries, for which he has not to render account, but that he undertakes to furnish fifty horsemen's armours per month. He further states that this "is to the King's detriment," and asks for it to be revoked.

(S. P. Dom. Car. I, CLV, 38.)

- „ Petition of Roger Falkenor complaining of the misconduct of Sir Thomas Jay, Master of the Armouries, under a grant made lately of all the old armour in the Tower.

(S. P. Dom. Car. I, CLIV, 15.)

1630. Articles administered to Sir T. Jay as to old and serviceable armour in the Tower. This is evidently an enquiry made by the Commissioners of the Armoury on Medley's request.

(S. P. Dom. Car. I, DXXI, 127.)

- „ June 25. Petition of the Companies of Armourers and Gunsmiths of London as to the inspections of arms. Propositions of the Company of Armourers of London with regard to the same.

(S. P. Dom. Car. I, CLXIX, 41.)

- „ Secretary Coke³ reports on the state of the Armouries, their history, the nature of the present establishment and its defects.

(S. P. Dom. Car. I, CLXXIX, 65.)

- *1631. Regulations as to the use of a hall mark ("A" under a crown) by the Armourers' Company of London.⁴

(Rymer's *Foedera* XIX, 309.)

- „ List of new rates of prices of the Company of Workmen Armourers and Gunmakers for arms of horse and foot set down by their Lordships' Committee.

(S. P. Dom. Car. I, CLXXXVIII, 87.)

¹ Sir John, son of Sir Christopher Heydon; Lieutenant of the Ordnance, knighted 1620, Lieutenant General of Ordnance to Charles I during the Civil War, D.C.L. Oxford 1642.

² See page 63.

³ Sir John Coke (1563-1644), Secretary of State, knighted 1624, dismissed from office 1639.

⁴ Many of the pikemen's helmets and breastplates in the collection are stamped with this mark (II, 110, 111, etc.).

1631. Roger Falkenor petitions the Lords Commissioners for the Armouries as to the results of keeping armour and swords in the Ordnance instead of in the Armouries.

(S. P. Dom. Car. I, CCVI, 30, 31.)

1635. Commission to Montjoy Earl of Newport to supply armour from the Tower, leaving enough for 10,000 men. The proceeds to be paid to the master of the Ordnance for the purchase of fresh arms.

(S. P. Dom. Car. I, CCXCIV, 27.)

* „ May. Petition of the workmen armourers of London for employment.

(S. P. Dom. Car. I, CCLXXXIX, 93.)

1636, July 1. Petition of Benjamin Stone, blademaker, to be allowed to supply swords “as good as any in the Christian world.”¹

(S. P. Dom. Car. I, CCCXVIII, 1.)

„ July 2. Petition of Rebecca Holman as to certain houses on Tower Hill, which were claimed by the Earl (Lord Keeper Coventry²) as some sort of appurtenant to the office of the Armouries.

(S. P. Dom. Car. I, CCCXXVIII, 8.)

1638. Statement of the armourers of London as to the prices at which armour can be made. The reasons for high prices, such as wages, materials, coals and the price of food, are given.

(S. P. Dom. Car. I, CCCXCIII, 67.)

1649, February 22. Warrant for six halberts, partizans and bucklers taken from the Spaniards in 1588,³ to be delivered from the Tower to Whitehall.

(S. P. Dom. Interreg. Councils of State, I, 62/10.)

1649, May 18. Order to Edward Ansley, Master Armourer, to search for and seize the rich arms of the late King wherever concealed, and all tools and implements of the Master Armourer at Greenwich.

(S. P. Dom. Interreg. Councils of State, I, 62,325.)

1650, January 11. Order to the Armoury officers to shut up the door of the Armoury over the Powder House till the powder is removed to the White Tower.

(S. P. Dom. Interreg. Councils of State, I, 63, 509.)

„ February 2. Order sent to the officers of the Armoury of the Tower to provide forty halberts for the guard who attend the Council at Whitehall.

(S. P. Dom. Interreg. Councils of State, I, 63, p. 588.)

¹ A patent was granted to Stone, dated July 1, 1617, for a contrivance for making sword blades, etc. (Patent Office No. 4.)

² First Baron Coventry (1578–1640), Recorder of London, Solicitor-General and knighted 1617, Attorney-General 1621, Lord Keeper 1625, created Baron Coventry of Aylesborough 1628.

³ These were from the so-called “Spanish Armoury.” See page 29.

44 THE ARMOURIES OF THE TOWER OF LONDON.

1650, April 23. The Council of State to consider the whole question of the Office of the Ordnance and Armoury, what officers are fit to be continued and what to be reduced.

(S. P. Dom. Interreg. Councils of State, I, 88, p. 20.)

*1660. Survey of the Armouries taken on the Restoration of Charles II. This is included in the Inventory of that date.

(Brit. Mus. Harl. MS. 7457.)

„ Warrant [to the colonels of regiments] to restore to the Master of Ordnance all arms and armour delivered from the Tower before the Restoration.

(S. P. Dom. Car. II, XXVI, 5.)

„ Petition of Sir Abraham Shipman to the King for the office of Chief Armourer in the Tower “ now in the possession of one Ansley a fanatic.”¹

(S. P. Dom. Car. II, CCXX, 88, 89.)

1662, March 24. Privilege to John Wemis, Master Gunner of England, to use his invention, a new way of making light ordnance shooting from a quarter-pound bullet to a penny cannon.

(Patent Office, No. 136.)

„ July. “ In this month many persons of quality went to the Armoury in the Tower of London to see that most noble and strong defence for the body, the suit of armour sent from the Emperor Mougul, which suit was presented to His Majesty the King of England.”²

(Thomas Rugge, *Mercurius Politicus Redivivus*, 1659—1672, Brit. Mus. Add. MS. 10117, fol. 39.)

1672, February 15. Licence to John Wells for fourteen years to use artificial horses for running at the ring, throwing the lance, shooting the pistol and taking up the head.

(Patent Office, No. 167.)

A patent was granted to Raphael Folyout for a similar contrivance called “ Royal Carousell ” in 1673.

1690, January 16. The Duke of Schomberg,³ writing to the King about the war in Ireland, says that “ The Officers of the Tower should look better after the muskets. . . . I have not asked for pikes, being persuaded that sweins feders⁴ are more serviceable in Ireland.”

(S. P. Dom. King William's Chest, VI, 90.)

¹ Edward Annesley, or Aynesley, was Clerk of the Armouries under Charles I and member of the Armourers' Company. He was continued in this office by Cromwell by an order dated April 26, 1649. Shipman was not given the post, but was made keeper of Sir Robert Howard's lighthouse at Dungeness, near Rye, in 1661.

² This probably refers to the armour II, 131. See entry under 1611.

³ Frederick Hermann (1615—1690) accompanied William of Orange 1688, K.G. and Master-General of Ordnance 1689, Commander-in-Chief of the Forces in Ireland and created Duke of Schomberg 1689, killed at the Battle of the Boyne.

⁴ See XIV, 16.

1692, March 24. Licence to Edward Hurd for a new invention of lacquering after the manner of Japan . . . for armour, guns, etc.

(Patent Office, No. 293.)

1754. John Dick applies to the Board of Ordnance for compensation for injury received to his vessel and hawser in shipping the Great Gun at Leith for conveyance to the Tower. The Great Gun was "Mons Meg," returned to Edinburgh in 1829.

(Tower Books.)¹

BUILDINGS.

1515, October. Adrian Brand, armourer, is paid £26 8s. per month for hire of his mill house for cleaning the King's harness.

1517, May 1. Payments to Sir Henry Guildford² for erecting two forges and for repairs to the Armoury at Southwark.

„ July. Payment to Henry Smyth for making an Armoury House at Greenwich, £400.

(Exchr. T. R. Misc. Book 215.)

1529. Hire of the "Crowned Key," a tavern at Southwark, for keeping the King's harness at 40s. the half year.

(Exchr. Acts 420/11.)

1559, July 6. Sir Edward Warner,³ Lieutenant of the Tower, and Thomas Stanley, Comptroller of the Mint, report on the fittest place in the Tower to erect a convenient armoury. He considers that the best site is that occupied by the Great Mill erected by Mr. Brooke.⁴

(S. P. Dom. Eliz. V, 2.)

1562. The Marquis of Winchester⁵ purchases a house and grounds which had belonged to a dissolved monastery of the Minories, without Aldgate, as a store for the Ordnance. It communicated with the Tower through an iron gate leading to St. Katherine's Wharf.⁶

(S. P. Dom. Eliz. XXII, 15.)

¹ These books are quoted by Hewitt in *Archæological Journal*, Vol. X. They have since disappeared.

² Sir Henry Guildford (1489–1532), half-brother to Sir Edward Guildford, Master of the Armouries; King's Standard Bearer 1513, accompanied Henry VIII to the Field of the Cloth of Gold 1520, Master of the Horse 1515–22, Comptroller of the Household 1529.

³ Sir Edward Warner (1511–65), Lieutenant of the Tower 1552–3, imprisoned for complicity in Lady Jane Grey's attempt on the throne 1554–5, re-instated as Lieutenant of the Tower 1558–65, Master of St. Katherine's Hospital 1560.

⁴ The mill was situated on the east side of the Traitor's Gate, and was demolished in 1843, when the moat was drained. Strype states that new sluices were made in 1663 (see page 20). The Armoury referred to is probably the building in Cold Harbour, afterwards called the "Spanish Armoury."

⁵ William Paulet, first Marquis (1485 (?)–1572), knighted *circa* 1524, Comptroller of the Household 1532, Lord Steward 1545–50, Lord President of the Council 1546, Keeper of the Great Seal and one of the Council of Regency 1547, created Earl 1550, Marquis 1551.

⁶ The iron gate was at the south-east corner of the Tower precincts (see plan on page 15).

1578, July 7. Order to the Treasurer and Chamberlain of the Exchequer to provide £300 for repairs of the houses and places where armour is kept under Sir Henry Lee, Master of the Armouries.

(Auditor's Privy Seal Book, 162.)

1580, August 26. Order to Sir Christopher Hatton, Burghley and Leicester, the Commissioners of the Armouries, to estimate for the making of rooms in the White Tower in which to hang up all the armour. Signed by Sir O. Hopton, Lieutenant of the Tower, H. Killigrew, John Hawkins and William Holstock. "Right honble and verye good lordes, accordinge to yr honors commandymnt by yr letter bearing date the fyrst daye of July 1580 we have made a survey of all the Armouris that dothe now remayne in the Tower of London, we have also understood that the State Quantities and sortes of the same made at the tyme of the death of Sir George Howard, knyght, the decay wherof and what chardge may putt the same in order and make it cleane. We have also consydered the chardge of makeinge roomes witheyn the Great White Tower in the Tower of London for placeinge and hanging up of all the Armoure. We have thoroughly examined and seen, by the judgement of workmen what the chardge may be. Whereof we do send yr honours inclosed an estimate, wh the chardge of the reforminge and puttinge in order of the Armoure."¹

(S. P. Dom. Eliz. CXLI, 42.)

1593, August 10. Order to the Treasurer and Chamberlain of the Exchequer to repair the Armoury Mills at Greenwich under Sir Henry Lee at a cost not exceeding £80.

(Auditor's Privy Seal Book, 353.)

1609, September 27. Memorandum from the officers of the Ordnance asking for a safer place to be found for the proving of gunpowder in the Tower of London.

„ October 4. George, Lord Carew to Lord Salisbury, that he recommends a place near the Mint where the gunpowder should be proved every month. He states that this will be of no danger to the Mint.

(S. P. Dom. Jac. I, XLVIII, 84.)

„ October 23. Warrant to pay Sir Roger Dallison, Lieutenant of the Ordnance £300 for fitting up certain rooms in the Tower for keeping and proving gunpowder.²

(S. P. Dom. Jac. I, XLVIII, 121.)

1610. Repairs of walls and windows, and plastering of walls against the coming of the King to the Tower. Accounts of Sir Henry Lee, Master of the Armouries.

(Audit Office, Decl. Accts. 2299/4.)

¹ No further details are given, but Platter states that there was armour shown in the White Tower in 1599 (see page 66).

² Thirty thousand barrels of powder were stored in the basement of the White Tower between the years 1708 and 1770. (Hatton, *New View of London*.)



Armour of King Henry VIII., II. 7.

- *1624. Erection of battering mills at Erith by Richard Martin for rolling plates of armour, which were formerly imported from abroad. The rates and prices for such plates and the amount of armour which could be made from a given quantity are scheduled.

(S. P. Dom. Jac. I, CLXXX, 71.)

- 1634 (?) Note on the houses and gardens on Tower Hill and Tower Wharf which belong to the Office of the Armouries in the Tower. There are thirty-six holdings in all at the total value of £503 10s.

(S. P. Dom. Car. I, CCCXXIX, 32.)

- 1637, February. The Armoury Mill consisted of two little rooms and one large one, in which stood two mills, altered in the year 1647 for grinding colours. It stood in an acre of ground near Lewisham Common, and was used till about the year 1637 for grinding armour and implements for the King's tiltyard.¹

(Parliamentary Survey, Kent, No. 30.)

- 1643, November 20. Letter of Privy Seal to Treasurer of Exchequer to pay William Legge, Master of the Armouries, £100 on account for building a mill at Woolvercott, near Oxford, for grinding swords and for forges, tools and other necessities of sword-blade making.

(S. P. Dom. Car. I, CCCXCVIII, 56.)

- „ February 26. Order to pay William Legge a sum not exceeding £2,000 on account for the mills at Woolvercote, County Gloucester, and for forges at Gloucester Hall, which have been erected.²

(S. P. Dom. Car. I, CCCXCVIII, 8, p. 29.)

- 1673, December 21. Hansard Knollys bought an old armoury house in the Artillery Ground near Spitalfields for £300. He built upon it, but lost all his outlay, as the place was needed for airing the stuff from the Tower.

(S. P. Dom. Car. II, CCCXXXVIII, 84.)

PAYMENTS AND RECEIPTS.

Many of these are the current accounts for wages and materials used in the Royal Armouries, and include such items as redskins of leather for bordering armour, calfskins, leather for gauntlets, round-head nails, tinned nails, flat-head nails, yellow nails, buckles, taches (pins or buckles), brokasses (brooches) and tace-joints (hinges for taces). There are also lists of tools, which are very similar to those mentioned under the year 1511. The armourers names will be found also in the list of craftsmen on page 492.

¹ This mill is described in the rental of the manor, 44, Edw. III, 1371, as one for grinding steel and valued at 3s. 4d. per annum. The grinding or "glazing" was effected by wheels and emery powder.

² There is an obvious mistake here, caused by the words "Gloucester Hall" (now Worcester College, Oxford). Woolvercote is in the county of Oxford. There is no trace of the mill or of the forges at the present day. The Clarendon Press Paper Mills occupy the site of the former.

1511. Payments to John Blewbery for the new forge at Greenwich for the armourers of Brussels, and the expenses of the same, 100s. 10d.

xviii September Also payde by Owre Commandement to John Blewbery for the new fforge at Greenwich made for the Armarers of Brussells these peces ensuyng.

	s.	d.
a vyce	xiii	iv
a greate bekehorne	lx	
a smalle bekehorne	xvi	
a peyre of bellows	xxx	
a pype stake ¹	iii	iv
a Creste stake ²	iv	
a vysure stake ³	iv	
a hanging pype stake ⁴	iv	iv
a stake for the hedde pecys ⁵	v	
ii curace stakes ⁶	x	
iv peyre of Sherys ⁷	xl	
iii platynge hamers ⁸	viii	
iii hamers for the hedde pecys	v	
a creste hamer for the hedde peces		xx
ii hamers	ii	viii
ii greve hamers ⁹	iii	iv
a meeke hamer ¹⁰		xvi
ii pleyne hamers	ii	
ii platynge hamers	ii	
ii chesels wt. an halve		viii
a creste hamer for the curace		xii
ii Rewetinge hamers ¹¹		xvi
a boos hamer ¹²		xii
xi ffyls ¹³		xi
a payre of pynsors		xviii
ii payre of tongs		xvi
a harth stake ¹⁴		vi
ii chesels & vi ponchons	ii	
a watr. trowgh		xviii
a temperinge barrelle		xii
one Andevyle	xx	
vi stokks to set in the Tolys	x	

¹ Round-horned anvil for making tubes.

² For beating up a helmet-crest.

³ For visors.

⁴ Uncertain.

⁵ Helmet-stake.

⁶ For the cuirass.

⁷ Shears.

⁸ Heavy hammers.

⁹ Hammers for greaves.

¹⁰ (?)

¹¹ Riveting-hammer.

¹² Embossing-hammer.

¹³ Files.

¹⁴ Poker.

	s.	d.
xvi doubles at xvi d every double ¹	xxi	iv
xviii quarters of Colys	vi	lx
in alle	xiii li	xvi s. xi d.

(Exchr. T. R. Misc. Book, Vol. I, p. 49.)

1511, November 4. To William Gurre, bregandy (brigandine) maker, for making clean, and for the workmanship of certain harness delivered to the *Mary and John*.

(Privy Seal Pat. 3, Hen. VIII, P. 2, memb. 5.)

1512, September 13. Payments made by Thomas Wuley on the King's behalf to a certain merchant of Florence for "2000 complete harnesses called Almayne rivets according to pattern in the hands of John Dauncy, accounting alway a salet, a gorget, a breastplate, a backplate and a pair of splints for every complete harness at 16s. a set." There are several similar payments made under this heading.

1513, February 16. Receipt by Master Gyflforde,² squyer, Master of the King's Armoury to Guido Portenari, merchant stranger for 2,000 harnesses for footmen.

(Brit. Mus. Campbell Charters VIII, 18, 19.)

„ Payments to Robert Bolte, John Blewbery, Leonard Frescobald of Florence, John Cavolcante ("merchant stranger"), Richard Fermour for arms and armour at the rate of 16s. per suit and for artillery at "our Feld besides Guysnes."

(Brit. Mus. Stowe MSS, 146; 11, 21, 27, 28, 31, 45.)

1514, June 3. Payment to Thomas Bolton for "Armour of Milleyne making and of the Milleyne touche" from Pietro Corso and Guido Portenari of Florence.

(Loc. cit. 146; 66, 73, 76.)

1515, March 2. Payment to Peter Fevers for armour "as curettes, vambras, legharnes, queffes and sculles."

(Loc. cit. 146; 87.)

„ Payment to John Blewbery of £11 8s. for gowns, coats and hose of eleven Almain armourers, also 100s. for their diets.

The wages at this period for these armourers were £16 12s. 6d. per month of twenty-eight days.

„ March. Payments to John Blewbery for making harness mills for the Armoury. There are entries of payments for arms and armour all through this year, including one in April for "grinding and gilding one greatguard, one little guard, three sapherons (chanfrons) and neck pieces for horses."

¹ Moulds for helmets, etc. (see IV, 143).

² Sir Edward Guildford.

1516, September. Payment to John Rutter of London "for hurts and damages by him sustained in a tenement to him belonging wherein the king's great gun called Basiliscus was cast and rent."

„ Payments of £13 16s. 8d. to Gertrude Braide, widow, for her mill, hammers, horseshoes and bekhorne.

1517, April. Payments for cleaning and repairing armour and for the purchase of "2541 lbs. of steel plates of Isebroke and Lymbricke stuff." (Innsbruck and Limberg iron and steel.)

„ July. Payments to Henry Smyth for making men and horses of wood¹ and a new tilt at Eltham.

(Exchr. T. R. Misc. Book, 215, fol. 7-577.)

1529, February. Payments to Herasmus (Kirkenor) for candlesticks and for "garnishing of books and for keeping clean the King's harness."

(Brit. Mus. Add. MS. 20030, p. 13.)

1530, April 21. Payment to Sir Lawrence Starber for a bombard (ten angels) for the King and "for conveyance of certain ores from this realm to Nuremberg to be there tried to the perfectness of their metals £18."

(Exchr. Acts. 420/11.)

1538. Table of the Wages paid to the Almain armourers at Greenwich.

(Brit. Mus. Arundel MS. 97.)

1544. A complete account of the charges of the King's Armoury, with the wages of the workmen employed.

(Brit. Mus. Cott. App. XXVIII, 71.)

1559, December. Expenditure in the Armouries.

(S. P. Dom. Eliz. I, 44.)

„ July 7. The standing Armoury at Greenwich, with the wages paid.

(S. P. Dom. Eliz. V, 3.)

1561. Accounts for materials and work done in the Armouries from the year 1556 by William Paynter, Clerk of the Armoury.

(Audit Office, Decl. Accts. 2299 1.)

1564. Warrant from the Queen to Sir George Howard,² Master of the Armoury, to make a suit of armour for Sir Christopher Hatton on his payment of the just value.³

(S. P. Dom. Eliz. XXXIV, 33.)

1567 (?) Payments for blacking 400 corslets "which took salt water (rust) six or seven years ago, sent to the Tower, being Sir Maurice Denis' Armour, at 5s. each."

(S. P. Dom. Elizabeth, Add. XIII, 104.)

¹ These would be for showing the armour.

² See page 62.

³ Possibly this is the armour made by Jacobe now in the Royal Collection at Windsor, No. 808.

1574. Wages list of the staff of the Greenwich Armouries.

(S. P. Dom. Eliz. XCIX, 50.)

1596, October 19. Warrant to pay Sir Henry Lee £2,000 3s., to be paid to the Armourers' Company of London for armour, viz. 449 cuirasses, 433 lances, armour complete, 96 cuirasses of proof, 62 targets of caliver proof and 54 targets of pistol proof.

(S. P. Dom. Eliz. CCLX, 66.)

1601. Accounts for the maintenance of the Armoury under Sir Henry Lee, Master of the Armouries between the years 1580—1601.

(Audit Office, Decl. Accts. 2299/3.)

1603. Warrant to the Master of the Ordnance to cause our Almain armourer to make a suit of good armour for Richard Browne, complete as for the tilt as for the field ; he to pay only the cost of the material.

(S. P. Dom. Eliz. CCLXXXVII, 70.)

1608. Payment to Sir Henry Lee the sum of £400 per annum, being the charges for the Armouries of the Tower, Hampton Court, Windsor, Greenwich, Westminster, Portsmouth and Woolwich.

(S. P. Dom. Jac. I, XXXV, 4.)

1610. Accounts of the executors of the late Sir Henry Lee between the years 1601—1610. These include tools, cleaning materials, metal, armour and weapons. Among the latter are "warlike implements as Tilte staves, longe pikes, swordes for barriers, vamplottes, coronetts, burres, and partynge staves, against his Maties. Coronacion, by Privy Seal dated June 1603." There are also "Extraordinary provisions aswell against his Maties. Coronacion and runnyng at ye ryng at the Kyng of Denmarke's being in Englande," dated 28 June, 1606.¹ (Pipe Office, Decl. Accts. 2963, Audit Office Decl. Accts. 2299/4.)

1613. Warrant to pay Sir Edward Cecil £330, the balance due for armour value £450, made for the late Prince. (S. P. Dom. Jac. I, LXXII, 98.)

1614, July 11. Warrant to pay to William Pickering,² Master of the Armoury at Greenwich, £200, being the balance of £340 for armour graven and gilt for the late Prince.³ (S. P. Dom. Jac. I, Warrants, IV, 29.)

„ Accounts for the maintenance of the Armouries from the year 1610 under Sir Thomas Monson,⁴ Master of the Armouries.

(Audit Office, Decl. Accts. 2299/5.)

¹ H. Roberts (*England's Farewell to Christian the Fourth*, 1606) states that on Monday, August 4, there was running at the ring, in which the Kings of England and Denmark excelled all others.

² Pickering was Master of the Armourers' Company.

³ This suit was made for Henry Prince of Wales, who died in 1613. It is probably the armour No. 678 in the Royal Collection at Windsor. The Vamplate was formerly in the Tower Collection, but was transferred to Windsor by command of His Majesty the King in 1914.

⁴ See page 63.

1622. Accounts of the Armouries from the year 1622 under Sir William Cope,¹ Master of the Armouries.
(Pipe Office, Decl. Accts. 2963, Audit Office, Decl. Accts. 2300 6.)
- 1621, November 24. Warrant to pay Sir William Cope £120 for 300 swords for Sir Robert Mansell's fleet.² (S. P. Dom. Jac. I, Warrants, XIII, 1.)
1625. Payment to the Master of the Armouries of £400 per annum for charges of the Armouries at the Tower, Hampton Court and Windsor, and £35 16s. 4d. for the Armoury at Greenwich.
(S. P. Dom. Docquets, Vol. 13.)
1626. Accounts of the Armouries from the year 1622 under Sir William Cope.
(Pipe Office, Decl. Accts. 2963.)
1629. List of expenses in the Armouries at Greenwich by Secretary Coke.³
(S. P. Dom. Car. I, CXLVI, 44.)
1633. Accounts of the Armouries from the year 1628 under Sir Thomas Jay,⁴ Master of the Armouries.
(Pipe Office Decl. Accts. 2963, Audit Office, Decl. Accts. 2300/9.)
- 1652, April 13. To John Jackson, cutler, for proving swords in the Armoury at the Tower, £20.
(S. P. Dom. Interreg. Councils of State I, 103, p. 585.)
1670. Accounts from the executors of the late Colonel Legge, Master of the Armouries from the year 1660. These accounts, which are mostly for repairs, include "Target and launce for the Champion at the Coronation (of Charles II), lxii s. vi d."
(Pipe Office, Decl. Accts. 2964, Audit Office, Decl. Accts. 2300/10.)
1686. Accounts for the maintenance of the Armouries from the year 1682 by G. Francklyn, Keeper of the Armoury.
(Audit Office, Decl. Accts. 2301/11-15.)

ISSUES, SALES AND DELIVERIES FROM THE ARMOURIES.

The following entries are taken from Books of Deliveries out of the Armouries of the Tower. (Public Record Office, W.O. 55 1656.)

- 1682, February 22. Order for the sale of old armour, including helmets, shaffrons, gauntlets, pauldrons, brigandines, pass-guards, saddle-steels, jackets of mail, burganets and crossbows, to be sold at 7s. 6d. per hundredweight.

¹ See page 63.

² Mansell was Vice-Admiral of England, and commanded an unsuccessful expedition to Algiers in this year.

³ See note ³ page 42.

⁴ See page 63.

- 1683, March 11. Sale of unserviceable armour, which includes backs, breasts, tilting armour, burganets, main-guards and pass-guards, in all 9 tons, 3qrs. 19lbs.
- 1685, April 9. Order to James Fitzgerald and Richard Holden, armourers, to clean and repair for the service of Mr. Dymoke, His Majesty's Champion on the day of the Coronation¹ one lance and one target.
- „ April 11. A similar order to prepare the suit of Edward III² for the Champion's use.
- „ May 19. To Charles Dymoke, His Majesty's Champion, by Royal Warrant: One Armour gilt consisting of Back, Breast, Placket, Helmet, Pouldrons, Vambrace, Cuishes, Knee-cops, Greaves, Spurres, Launce, Target, Gauntlet, Mainfaire.
- „ “At the Coronation of James II the Champion had a suit of Armour, Lance, and Target out of the Storehouse for the Service of the Day which was returned in again and a suit of Armour was provided by His Majesty's Warrant of 15 May, 1685 and delivered 19 May, 1685 to the Champion for his fee, viz—Lance, 1, Target, 1, Gauntlet 1, Mainfaire, 1 from the Stores.”
- (Storekeeper's Note in the above Delivery Book.)
- „ July 4. Issue to the Right Honble. the Earl of Arran and the Lord Ferrers by order of the Board of Ordnance, two suits of silk armour consisting of backs, breasts, skirts, quilted caps and gauntlets.³
- 1686, January 10. Rich white suit of Armour, parcel gilt and chased, Breast, Headpiece, and Gauntlet, to be placed in His Majesty's Closett for his own service.
- „ May 9. For His Majesty's use: Harquebus Armour, plain and sanguine, lyned crimson sattin: Breast, carbine proof, Back, Pott, Gauntlet, Gorget of crimson sattene.
- „ May 12. Three targets, one of iron and two of wood, sent from the Tower to decorate the Guard Room at Windsor.
- „ July 28. Ordered to be sent to Windsor: Tilting Armour for Man and Horse, Long gilt culet, Vambrace parcel gilt, Six saddle Steels parcel gilt, One Shaffron parcel gilt, Six white Vamplates, Seven Shaffrons parcel gilt, Two Kneecops, one gilt, One white Mainfaire parcel gilt, One white Vamplate engraved, One gilt Suit of Charles I,⁴ Three Vamplates sanguine and gilt, One Lance rest, Two Kneecops, Two mainguards parcel gilt, One Shaffron parcel gilt belonging to the Champion's Arms.

¹ James II.

² See page 25.

³ Examples of these are in the Pitt Rivers Museum, Oxford. (See also III, 50).

⁴ A note is made that this armour was returned to the Tower December 31 of the same year.

- 1687, March 17. Sale of a large store of armour, including Pots, Breasts, Backs, Plackets, Gauntlets, etc., many of them "taken from disaffected persons."¹
- „ John Harris² is mentioned in several entries in this year as receiving arms and armour for decorating Whitehall.
- 1688, September 26. Issues of armour to regiments raised by certain noblemen and others.
- „ October 27. Issue to Col. William Legge for his own use, by order of the Board: Harquebus Armour, carbine proof—Backs and Breast, two; Pot helmet, one; Gauntlet, one.
- „ October 30. Issue to Jacob Richard for his use in the train of artillery: Silk Armour, one suit.
- „ November 17. Issue to the Royal Regiment of Horse, their officers lately come from Scotland: Breasts, Backs, and Potts, 19 each.
- „ December 1. Lent to Sir Martin Becklin for his own use one suit of silk armour.
- 1689, April 10. To Charles Dymoke for Their Majesties' Coronation: One suit of Armour, white and gilt of Edward III, One Mainfaire, One Gauntlet, One Target gilt with a gold fringe, One Sword with a Belt, One pair of Pistols, One Launce.
- 1699, September. Delivered by proportion to Mr. Harris for His Majesty's service at Hampton Court: Tilting Armour, Four Grandguards, Six Pasguards, Six Headpieces, Two Shaffrons, Two kneecops.
- 1714, October 20. To Lewis Dymoke for use at the Coronation: Armour Cap-a-pe, white and parcel gilt of King Charles II,³ White Mainfaire, Short Gauntlet white engraven and gilt, Target painted with his own arms sewn round with silk fringe, Sword with scabbard of crimson velvet, Belt of crimson velvet.
- „ May 17. Letter from the Storekeeper-General to Lewis Dymoke Esq., stating that unnecessary expense had been incurred for his outfit for the Coronation of George I.
- 1715, April 14. Letter from the Secretary of the Board of Ordnance to Lewis Dymoke stating that he cannot retain the armour used at the Coronation "it being the armour of Charles II." A redemption fee of £60 is offered to settle the matter.

¹ Probably after Monmouth's rebellion.

² Harris made up the trophies in the grand storehouse at the Tower (see page 22).

³ Meyrick in his *Antient Armour*, published in 1824, states that the armour decorated with lions' masks (II, 89) was shown as that of Charles II.

- 1717, April 8. Delivered to be sold by auction by order of the Board of Ordnance: Helmets 136, Backs with culettes 602, Backs without culettes 529, Backs unserviceable 236, Brests repaired 371, Potts repaired 1084, Potts unserviceable 194, Old rusty armour 19.¹
- 1722, July 22. Delivered to Edward Earn to be laid on the coffin of ye late Duke of Marlborough during the procession to Westminster Abbey, By order of ye Board: Gilded Armour . . . one suit.²
1723. Delivered to Captain Corne by order of the Earl of Cadogan, Master of the Ordnance for his services: Guilded Armour of King Charles I; One suit parcel gilt Armour of King Charles II.³
- 1727, October 10. To Lewis Dymoke for use at Their Majesties' Coronation: Armour Cap-a-pe, white and parcel gilt, one; Gauntlets lined with doeskin and one pair of gloves; Target painted with his arms, one; Launce gilt with a fringe of gold, one; Sword with scabbard of crimson velvet, one; Belt of crimson velvet, one; Pair of Pistols.
- „ October 28. Delivered to the Master and Wardens of the Company of Armourers and Braziers, the same being lent to them for their use on the 30th inst., being His Majesty's birthday, the Lord Mayor's Day and His Majesty's Dining with the Lord Mayor of London: Armour Cap-a-pe of King Henry ye 5th, one⁴; Armour for foot, six; Targets parcel gilt, two; Battle axes, two; Flaming sword, one; Broadwords, six; Belts, nine.
- „ November 13. Delivered to Mr. Cibber of the Theatre Royal in Drury Lane by order of the Board dated 11th inst., to perform the Champion part at the Coronation in the play of King Henry VIII: Armour Cap-a-pe of King Henry V, one; Target parcel gilt, one; Tilting Lance, one.
- 1729 (?) "At the Coronation of King William and Queen Mary the Champion had delivered to him from the Stores the Armour mentioned above for his use on the Day of Their Majesties' Coronation which he never returned again into the Storehouse but kept for his fee. And at the Coronation of Queen Anne he wore the same Armour he did at the Coronation of King William and Queen Mary and from the Storehouse he had only a lance which was returned. From a letter written 17 March, 1714, it appears that the Champion at the Coronation of Queen Anne had for his fee £50 and furnished himself with everything."

¹ These are classed under the headings Portsmouth, Whitehall and Monmouth's. The latter were used in the rising of 1685. Two scythe blades used by Monmouth's troops are included in the present collection (VII, 960, 961).

² The armour of Charles I (II, 91). A collar of SS was added according to the guide books of 1744 (XVI, 5).

³ II, 91, 89. These suits were again issued on May 22, 1725.

⁴ This armour cannot be identified. Meyrick, writing in 1824 (*Antient Armour* III, 111), states that it was a suit of the seventeenth century.

The Armoury Issue and Receipt Books between the years 1729—1855 appear to have been destroyed some years ago, when many other valuable documents connected with the Armouries were burnt as waste paper.

The following are from later Delivery Books in the Public Record Office :

1855, August. Armour ordered to be returned from Windsor to the collection at the Tower.

(W. O. 46/162, p. 16.)

1857, January 1. Letter from Director-General of Stores saying that the Lord Chamberlain will take the Queen's opinion as to using the Council Chamber in the White Tower for the Store Department.¹

(W. O. 46/163, p. 150.)

1858, January. The Secretary of State for War orders that no more flintlocks or other arms are to be sold from the Tower.

(W. O. 46/164, p. 243.)

The following are from the Storeholder's Receipt Books preserved in the Office of the Armouries :

1860. Issue of local Militia colours to the Lords-Lieutenant of Surrey, Oxford, Stafford, Warwick, Berkshire, Shropshire, Cardigan, Lancashire, Essex, Bangor, Derby, Cambridge, and to the Mayors and other authorities of Maidenhead, Stockport, Congleton, Macclesfield, Portsmouth, Blandford.²

1861. Issue of Maltese suits, pikemen's armour, breasts, backs and staff weapons to several Fortresses, etc.

„ Issues of armour and weapons for decorating the Armoury House of the Honourable Artillery Company at Finsbury ; returned after use.

1865—1877. Issues and receipts for the armour lent to the Lord Mayor and Corporation of London for the Lord Mayor's Day. The numbers vary each year. The largest issue was in 1869, when 26 suits and 270 swords and staff weapons were issued. From the number of suits lent it is probable that some were of historical value. It is to these loans that we must trace the damage caused to many unique pieces.

¹ The Council Chamber, or upper floor, of the White Tower seems to have been used as part of the Record Office. There is no definite evidence of this, but the skylights were put in in 1811 by Mr. Lysons, Keeper of the Records.

² The remaining local Militia colours were issued in 1914. See page 13,



Armour of King Henry VIII., II. 8.

- 1871, July 22. Requisition by the Armoury Keeper, W. Brailsford, that the inscriptions in the Elizabethan Armoury should be covered with glass as they are becoming worn through the treatment of them by visitors.¹
- 1872, May 30. Requisition of the Armoury Keeper for a new dress and wig for the figure of Queen Elizabeth.
- „ November 19. Statement by the Armoury Keeper that in dismantling the figures of Queen Elizabeth and of her page the boots of the latter were found to be marked “October /74.” A new dress was purchased for the figure of Elizabeth in 1827, and the page’s jerkin was purchased at a “sale of Ancient Armour” in 1828.²
- 1877, November 11. Order from the Secretary of State for War that the City Remembrancer be recommended to procure armour of modern manufacture for future occasions, so that the national collection may not be subjected to such rough and irreparable damage.
- 1885, February 18. The Constable, Sir Richard Decies, G.C.B., desires to record his appreciation of the exertions of all ranks in the Tower at the explosion on the 24th ultimo, especially thanking Lieut.-Genl. G. B. Milman, Major of the Tower, Major Gorkham, Royal Artillery, Commanding Fire Brigade, and his detachment, Lieut. and Adjutant Ackland Hood and the second Battn. of the Grenadier Guards, of which he was senior Officer present on the occasion, and Assisting Commy. of Ordnance, G. M. Thorne, in charge of the White Tower, with all his department employed therein.

The Constable has deemed it his duty to bring their services to the notice of the Queen, and her Majesty has been pleased to express through Sir Henry Ponsonby her entire gracious approval of their conduct.³

(Sgd.) CHELMSFORD.
Lieutenant of the Tower.

¹ The Elizabethan Armoury was at the east end of the “Gun,” or ground, floor of the White Tower in the crypt beneath St. John’s Chapel.

² See page 8.

³ No mention is made of Barber the Armoury Keeper, through whose efforts the gates were closed and the criminal captured.

THE OFFICE OF THE ARMOURIES.

THE earliest record of a Keeper of the Armouries in the Tower is to be found in the Close Rolls, 2 Edward III, memb. 14 (1327-8), in which John de Flete, Keeper of the Wardrobe in the Tower, is ordered to deliver arms and armour to John de Montgomery. In the same records of the thirteenth year of Edward III (1338-9) we find John de Flete styled "Keeper of the Arms of the Tower," and his instructions are to deliver arms, armour, hauberks, lances, arblasts, espringals and quarrells for the defence of Southampton. In the nineteenth year of the same monarch (1344-5) Robert de Mildenhale, called "Keeper of the Wardrobe of the Tower," is ordered to receive into his custody 800 painted bows, 400 plain bows, 1,000 sheaves of arrows and 4,000 bowstrings, provided by the Sheriffs of London.

From the above entries it will be seen that the office of Keeper of the Wardrobe included that of supervisor of the Armouries, and this is borne out by the Wardrobe Expenses of Edward I, in which Robinet, the King's tailor, is scheduled as providing armour, banners, helmets, crests and robes for the King.¹

In the year 1430 we have the first definite Grant of Appointment to an official connected with the Armouries in the Patent Rolls of Henry VI, dated November 14, in which John de Stanley, Constable of Carnarvon Castle and Sheriff of Anglesea, is granted the office of "Sergeant of the King's Armoury within the Tower" at a salary of 12d. per day, vice John Orell. From the same records, under the year 1453, we find that the pay of the Keeper of the Armoury, evidently a subordinate official, is given as 7½d. per day.

The next Grant appears also in the Patent Rolls under the date of March 11, 1461, wherein John Don, or Doon, succeeds to the office of Sergeant, with Henry Gray and John Roger as Keepers of the Armoury. In the following year John Don is called "Sergeant or Master of the King's Armoury."

With Don therefore begins the succession of distinguished men who controlled the Armouries and their contents under the style of Masters of the Armouries for just over 200 years, after which the title and office were abolished. From the Exchequer Miscellany Books, Treasury Receipts, preserved in the Record Office, the salary appears to have been 1s. per diem till the reign of Henry VIII, when it is given as £100 per annum.

The most celebrated of the holders of this office was John Dudley Duke of Northumberland, who resigned in 1544 on his appointment as

¹ *Liber Gardroboe, Edwardi I.* Society of Antiquaries, 1787.

Governor of Boulogne, and was beheaded in 1553 for his complicity in the attempt of his daughter-in-law, Lady Jane Dudley, on the English Crown.

The office was one of importance in the State, for the Master of the Armouries walked next to the Lieutenant of the Tower in the procession to St. Paul's to return thanks for the victory over the Armada. In the Coronation procession of Charles II the order was as follows : 1, Master of the Armoury ; 2, Master of the Wardrobe ; 3, Master of the Tents ; 4, Master of the Revels ; 5, Master of the Ordnance ; 6, Master of Ceremonies.

Among the State Papers Domestic of Charles I of the year 1626 (xxiii, 117) an abstract is to be found which deals with the Patents and Privy Seals granted to certain officials of the Armouries, but it has no great importance as bearing upon the office of Master. The few scattered entries in the State Papers which deal with the Armouries are almost entirely connected with



THE MASTER OF THE ARMOURIES
in the Coronation Procession of Charles II.

(From an Engraving by John Ogilby.)

issues of arms or accounts for cleaning materials, etc. It is only about the year 1628 that we find serious charges raised against the Master, Sir Thomas Jay, and his conduct of official business. Jay never recorded his patent of knighthood, and was therefore styled "ignobilis" in the Visitation of Wiltshire. He was the cause of frequent petitions to the Crown on account of his selling inferior positions in the office and generally conducting the work of the Armouries in an unsatisfactory manner. The last holder of the title was Colonel William Legge, who was deprived of his post in the Rebellion of 1648. In the following year William Moulins, Comptroller of the Artillery Train of the City of London, petitioned for the office, but there is no record that he ever obtained the appointment.¹

Colonel Legge was restored to his office on the return of Charles II, and on his death the title was abolished, and the conduct of the Armouries was handed over to the Master of the Ordnance.

¹ S. P. Dom. Interreg., I, 62, 492.

The Board of Ordnance, and, later, the War Office, controlled the Armouries, and up to the year 1895 appointed Storekeepers, or Armoury Keepers, as they are sometimes styled, to take charge of the armour and weapons exhibited in the Tower. These officials do not appear to have been distinguished by any great historical knowledge, and many absurd fables connected with the exhibits were chronicled as serious facts. Mr. R. Porret, F.R.S., F.S.A., was Storekeeper in 1841, and made some useful suggestions as to the provenance of the engraved suit (II, 5), which Sir Samuel Meyrick replied to somewhat discourteously.¹ Mr. G. Stacey was also a Storekeeper at this period, and arranged the trophies of arms which formerly covered the walls and ceilings of the Armouries, which will by degrees be dismantled, as inconsistent with the dignity of the Collection.

In the year 1869 J. R. Planché, *Somerset Herald*, made a report to the Board of Ordnance on the state of the Armouries, and asked urgently that a Curator of some standing might be appointed. Nothing was done till the year 1895, when Viscount Dillon was invited to place his services at the disposal of the Crown as first Curator of the Armouries. On May 28, 1903, he was given Honorary Freedom of the Armourers' Company, a compliment which was also paid to his successor on July 23, 1914. On June 18, 1913, the University of Oxford conferred on Lord Dillon the degree of Doctor of Civil Laws, "*Honoris Causa*," in recognition of his historical researches, especially in military subjects.

In 1903 the War Office approached the Trustees of the British Museum with a view to that body taking over the care of the Collection of Arms and Armour. The suggestion was that the authorities of the Mediæval Section of the British Museum should undertake this duty without any real control or executive power.

A tentative arrangement was made which was cancelled in 1904, and in the following year His Majesty's Office of Works, who had already the control of the buildings of the Tower, assumed the care of the Royal possessions, which form the more important portion of the Collection, and the full proprietary rights over the other exhibits.²

The site of the actual Office of the Armouries is not definitely known, but it was probably somewhere to the North of the Tower precincts, as the Lodging of the Master and the Office of the Ordnance were both situated in this part. Between the years 1885 and 1915 the Office in which the work connected with the Armouries was conducted consisted of part of the passage way in the thickness of the wall on the South side of the Upper Armoury. The windows in this part are the only examples left untouched by Wren in his restoration of the White Tower. The Office was moved to the Clock Tower in 1916.

¹ Volume of papers and letters collected by Sir Samuel Meyrick, now in the possession of Dr. Carrington Sykes.

² Office of Works, Minutes and Correspondence 2305, 10-3-05.



JOHN DUDLEY, Duke of Northumberland, K.G.,
Master of the Armouries, 1534-1544.

(From an Engraving.)



VISCOUNT DILLON, Hon. D.C.L., F.S.A.,
First Curator of the Armouries, 1895-1913.

(From a Photograph by Elliott & Fry.)

The following have held the office of Master of the Armouries. Where no Grants of Appointment have been found the date given is that of the earliest mention in the State Papers Domestic :

1461. John Don, or Doon. Possibly he was father or a relative of Griffith Doon, whose name figures prominently in accounts of jousts and pageants held in the reign of Henry VIII. Grant of Appointment March 11, 1461.
1485. Sir Richard Guilford, K.G., of Hempstead, Kent (1455(?)-1506). Master of the Ordnance, attainted by Richard III, Privy Councillor and Chamberlain of the Exchequer 1485 ; reclaimed the Guildford level in Sussex, attended Henry VII at Boulogne 1492 ; Sheriff of Kent, Controller of the Household, created banneret for services against the Cornish rebels 1497 ; K.G. 1499 ; died on a pilgrimage to Jerusalem September 6, 1506. The account of this pilgrimage was printed by Pynson in 1511. Grant of appointment August 8, 1485 ; re-grant to himself and his son Edward for the lives of each 1493.
1506. Sir Edward Guilford, son of the above. Marshal of Calais, Lord Warden of the Cinque Ports, knighted at Tournay 1513.



SIR RICHARD SOUTHWELL,
Master of the Armouries 1554-1561, 1573-1578.
(From a Portrait by Holbein in the Uffizzi Gallery, Florence.)



SIR HENRY LEE, K.G.,
Master of the Armouries, 1578-1611.
(From Viscount Dillon's Collection.)

1533. Sir John Dudley, Duke of Northumberland, K.G. (1502 (?)—1553), married Jane, daughter of Sir Edward Guilford. Knighted by the Duke of Norfolk in France 1523; Deputy-Governor of Calais 1538; Warden of the Scottish Marches 1542; created Viscount Lisle, Great Admiral, Privy Councillor and K.G. 1542; Governor of Boulogne 1544; resigned the office of the Armouries in the same year; Joint-Regent of England 1547; Earl of Warwick and High Chamberlain 1547; defeated the Scots at Pinkie 1547; Chancellor of Cambridge University 1552; beheaded in the Tower for his complicity in Lady Jane Dudley's attempt on the Crown August 22, 1553. Grant of Appointment July 6, 1533.
1544. Sir Thomas D'Arcy. Knighted at Calais on All Hallows Day, 1532. Grant of Appointment June 9, 1544.
1554. Sir Richard Southwell (1504—1578). Knighted 1542; Privy Councillor under Edward VI, Master of the Ordnance.
1561. Sir George Howard, second son of Edmond Howard, and grandson of Thomas Howard third Duke of Norfolk. (Frontispiece)
1575. Sir Richard Southwell resumed office. He had apparently resigned in favour of Sir George Howard, but no records of this are preserved.
1578. Sir Henry Lee of Ditchley, K.G. (1530—1610). Clerk of the Armoury 1549—1550; knighted 1553; Master of the Leash, Champion of Queen Elizabeth, President of the Society of Knights Tilters, K.G. 1597. Grant of Appointment June 9, 1580.



SIR THOMAS MONSON,
Master of the Armouries, 1611-1615.

(From Lord Monson's Collection.)



COL. WILLIAM LEGGE,
Master of the Armouries, 1638-1649, 1666-1670.

(From a Portrait after Jacob Huysman, National Portrait Gallery.)

1611. Sir Thomas Monson (1564-1641). Knighted 1588; M.P. for Lincolnshire, Castle Rising and Cricklade, Hon. M.A., Oxon, 1605; baronet 1611; accused of complicity in the poisoning of Sir Thomas Overbury and deposed from office 1615. Grant of Appointment March 11, 1611.
1615. Sir William Cope of Hanwell (1577-1637).
1628. Sir Thomas Jay of Netheravon, Wilts. Knighted at Wilton October 3, 1625, but never took out his patent at the College of Arms. There were frequent petitions made by Roger Falkenor and others against the corruption and incompetence of this official. Grant of Appointment September 25, 1628.
1638. Colonel William Legge (1609-1670). Lieutenant-General of Ordnance; Governor of Oxford 1645. After the Battle of Newbury on September 29, 1643, Charles presented Legge with a hanger mounted in agate and gold, and offered him a knighthood, which he refused. He was deprived of his office and imprisoned for high treason in 1649, restored as Master of the Armouries by Charles II in 1666 and refused a peerage for himself, which was then conferred on his eldest son, the first Lord Dartmouth.
1671. By Warrant of Sir Thomas Chicheley, Master of the Ordnance, the office of the Armouries was merged in that of the Ordnance.

1895. Harold Arthur, seventeenth Viscount Dillon (born 1844), Hon. D.C.L., Oxon, F.S.A. Succ. 1892 ; Rifle Brigade ; President of the Royal Archæological Institute 1892—1898 ; President of the Society of Antiquaries 1897—1900 ; Trustee of the British Museum 1905 ; Chairman of the Trustees of the National Portrait Gallery 1894 ; Antiquary to the Royal Academy, Hon. Member of the Company of Armourers and Braziers, Hon. D.C.L., Oxon, 1913. Appointment as first Curator of the Armouries 1895 ; retired December 31, 1912.

OFFICIALS OF THE ARMOURIES.

- 1327—1339. John de Flete, Keeper of the Armoury.
 1344. Robert de Mildenlale, Keeper of the Wardrobe of the Tower.
 1429. John Orell, Sergeant of the Armoury.
 1430. John de Stanley, Sergeant of the Armoury.
 1461. Henry Gray, Keeper of the Armoury.
 1461. John Roger, Keeper of the Armoury.
 1588. John Lee, Clerk of the Armouries.
 1626—1629. Roger Falkenor, Clerk of the Armoury.
 1649. Edward Annesley, Clerk to the Armouries and Master Armourer.
 1686. George Franklyn, Keeper of the Armoury.
 1827. George Stacey, Storekeeper.
 1841. R. Porrett, Storekeeper.
 1870. W. Brailsford, Armoury Keeper.
 1885—1893. E. Barber, Armoury Keeper.
 1893—1915. Sergt.-Major Buckingham, Foreman of the Armouries.

For list of Armourers see page 493.



Armour of King Henry VIII., II.9.

ROYAL AND OTHER VISITORS TO THE ARMOURIES

1592—1914.

1592. Jacob Rathger, secretary of Frederick Duke of Wirtemberg, writes of the Armouries¹:

As we stayed in London the 22nd and 23rd of August His Highness was shown the Tower of London as well as the Mint and the Armoury therein, which, however, is not indeed to be compared with the German Armouries, for, although there are many fine cannon in it, yet they are full of dust and stand about in the greatest confusion and disorder. At the top of the Armoury there is an unspeakable number of arrows which is a sufficient proof that the English used such things in battle in former times.² In the same place His Highness was shown the long barrel and stock which belonged to Henry VIII father of her present Majesty³; this he is said to have carried on his saddle and it may be compared to a musket; also his lance or spear which a man has enough to do to lift.⁴

1598. The first detailed description we have of the Armouries as one of the sights of the Tower is from the pen of Paul Hentzner⁵ after his visit to London in 1598. He writes:

We were next led to the armoury, in which are these particularities: Spears, out of which you may shoot⁶; shields, which will give fire four times⁷; a great many rich halberds, commonly called partisans, with which the guard defend the royal person in battle; some lances covered with red and green velvet; and the suit of armour of Henry VIII⁸; many and very beautiful arms, as well for men as for horse-fights; the lance of Charles Brandon, Duke of Suffolk, three spans thick⁹; two pieces of cannon, the one fires three,¹⁰ the other seven balls at a time; two others made of wood,¹¹ which the English had made at the siege of Boulogne in France—and by this stratagem, without which they could not have succeeded, they struck terror as at the appearance of artillery, and the town was surrendered upon articles; nineteen cannons, of a thicker make than ordinary; and, in a room apart, thirty-six of a smaller; other cannons for chain-shot and balls, proper to bring down masts of ships; cross-bows; bows and arrows, of which to this day the English make great use in their exercises. But who can relate all there is to be seen here? Eight or nine men, employed by the year, are scarce sufficient to keep all the arms bright.

It will be noticed that Hentzner sets more store by the ordnance, which was at the time something of a novelty, than he does by the armour which was still in everyday use. The one exception he makes is the armour of Henry VIII, which, from the prominence which he accords to it in his

¹ *A True and Faithful Narrative of the Bathing Excursion of His Serene Highness Frederick Duke of Wirtemberg*, Jacob Rathger, Basle, 1602.

² The English used bows up to the Civil War, for Charles I raised a company of archers in the University of Oxford. (C. foulkes, *Arms and Armour in the University of Oxford*, 1911.)

³ XII, 17.

⁴ Called at a later date "Charles Brandon's lance" (VII, 550.)

⁵ *Itinerarium*, Breslau, 1612.

⁶ Combined staff weapons, XIV, 12.

⁷ Pistol shields similar to V, 27.

⁸ Probably the "Engraved suit," II, 5.

⁹ See note 4.

¹⁰ XIX, 17.

¹¹ The gun called "Policy." (See page 22.)

description of the collection, was probably the "Engraved suit." In its original condition, entirely gilt, this must have been one of the most striking pieces in the Armouries.

1599. Joseph Platter, a Swiss traveller of Basle, visited the Tower, and minutely described the buildings and their contents. He appears to have known Hentzner, or, at any rate, to have had access to Hentzner's journals, for some of the descriptions of the two travellers are almost word for word identical.¹

First of all we found ourselves in an armoury wherein were many coats of armour, weapons and pikes. We were shown the actual armour of King Henry, the which was mighty burdensome,² together with his helmet, placket and yellow gauntlets. Item a specially heavy finely worked mace, and many guns with the which one may shoot.³ In this room we gave our first present of three English shillings to a servant appointed to receive the same.

In the next place we were taken into a room in which were naught but holster pistols and the like. They showed us one that did belong to the last Henry, ye father of ye Queen that is, the which is ten spans in length⁴; likewise a pistol, which he was wont to carry on his saddle, and one which could be loaded at the breech, that by this means it might be the less readily exploded.⁵ This pistol is very like a musket. At this place we gave our second largesse.

Then we did see a suit of armour which had belonged to King Henry VIII, therewith was also a pistol that could be discharged by one finger, and many other of the same kind were there likewise.

In the next room we did see a countless number of arrows, the which showeth that the English formerly used this self-same weapon in battle for many wooden bows were also to be seen. They had likewise a large number of arrows such as might be shot from muskets—that is to say, after they had been fastened together to make a charge. One of these I did bring back with me unto Basle.

From that place they did lead us into another room, the which was full of armour, wherein were many saddles girt with iron, together with horse armour that did hang from the reins. Likewise the lance or spear of the Duke of Suffolk of such a size that it was as much as a man could do to lift it.⁶

This lance he used at the Tournament in France. Item we did see another ball of iron with two wicks, one wick the which should burn its way through the sulphur to another wick on the other side. Likewise there were many spears both for horse and foot, and many buckets were hung on the shelf. Here we gave largesse again. In another room, but somewhat lower down, we did behold many small field pieces, set on wheels, the one with seven barrells, which could be severally discharged; likewise another, the which was square but had three barrells.⁷ Here we gave our fourth gratuity.

Next they did show us two great wooden pieces, the which King Henry VIII had placed in a marshy position over against the town of Boulogne, whereat the inhabitants of the town were full of terror, for that they did think it to be a real battering ram, and could not imagine how it could have been got there on account of the soft ground, and in consequence, when they saw this strategy, immediately surrendered the town.⁸

We did then go into another part—or, rather, into another storey—of the Castle through a winding staircase, and did come to a great Hall in the which Julius Cæsar, the first Emperor, is said to have dined.⁹

Thence we went into a garden room,¹⁰ and in a cellar did see the ropes which they used to hang the malefactors. Next we passed through an old armoury, where in one part were shown a great number of tapestries.

¹ Translated by Dr. Rosedale, F.S.A., 1913.

² Either II, 6, 8, or 9.

³ XIV, 1.

⁴ XII, 17.

⁵ XII, 1.

⁶ VII, 550.

⁷ XIX, 17.

⁸ The guns "Policy." (See page 22.)

⁹ Probably the "Banqueting Hall," or second floor, of the White Tower.

¹⁰ The Bloody Tower was called the Garden Tower at this time; the Lieutenant's garden was in front of the King's House.

The rest of the description deals with tapestries and furniture stored in the precincts of the Tower at this time, and concludes with a detailed account of the Mint and Menagerie. When we take this journal in conjunction with the extract which refers to the hanging up of armour in the White Tower, given on page 46 under the date 1580, it appears to be evident that the tower Platter refers to is the White Tower, for he states that ordnance was kept on the lower floor. It also seems likely that "another storey of the same Castle through a winding staircase," in which was the hall where Cæsar used to dine, is the upper floor of the White Tower, which still bears the traditional name of the Banqueting Hall. Both the White Tower and the Salt Tower were called Cæsar's Tower at different periods; but it is certain that no large store of arms could have been kept in the latter. In describing the precincts of the Tower Platter mentions "two cannon of unusual size which a certain Netherlander did cause to be cast."¹

1603. Visit of James I, July 29. An address in Latin was made by William Hubbocke, in which he refers to "Mountains of bullets, ordnance, dartes, pikes, bowes, arrowes, privy coats, helmets, gunpowder, and the whole furniture to chivalry for service on horse, on foot; by land, by sea exceedingly stored." On May 3 in the same year James again visited the Tower, and watched from his barge twenty cannon discharged from the roof of the White Tower and 230 pieces on the wharf and in other parts of the fortress.²

1606. Visit of Christian IV, King of Denmark, August. He inspected most of the curiosities and "ascended the White Tower where he himself discharged a peece of ordnance."³

1606, September 16. Frederick Gerschow, tutor of Philip Julius, Duke of Stettin-Pomerania, describes the ducal visit as follows⁴:

His Princely Grace, having obtained permission, visited the Tower of London, an old but very strong castle, built by Julius Cæsar, where they keep the prisoners. At first [we] were led into a long hall⁵ full of harness, maybe for 100,000 men, as one might say, but this armour was not properly arranged nor kept clean⁶; a heavy helmet (sturmhäub) was shown to us that had been shot at with a musket, also a big tilting lance⁷ with which the Duke of Sopfat (Suffolk) at a tournament won the Queen of France, a born English lady.⁸ Below this hall there stood eighty large pieces, many of them having been taken from the Spaniards, also two wooden guns, by which Henricus Octavus, using a peculiar stratagem, gained Boulogne in France.⁹ . . . Besides those there stood in front of the castle more than two hundred cast pieces, large and small. In this lodgment there was a goodly number of pitch-arrows (pichplützen) for shooting with bows into ships to set them on fire. Also arrows for shooting from musketry; bows for throwing fiery balls; a mighty large heap of common bows and

¹ Probably Peter van Collen, who, with Peter Baude, cast ordnance for the King. Baude cast XIX, 17 of the present Collection.

² Nichols' *Progresses of James I.*

³ Loc. cit.

⁴ *Royal Historical Society*, June 16, 1892.

⁵ Possibly the Spanish Armoury, *q.v.*, page 29.

⁶ See note on Armour, page 39. Sub. Ann. 1588.

⁷ VII, 550.

⁸ Mary, daughter of Henry VII of England and widow of Louis XII.

⁹ See page 22.

arrows, such as are used against the Irish ; lances used by horsemen, some for driving from the knee, some to be thrown by hand. In the third hall stood a number of halberds, most of them gilded over and covered with red velvet, for the Life Guards ; a number of targets, made in such a manner that a gun could be discharged underneath them, and one was covered with glittering stones so as to dazzle the enemy with the sun.¹ They were all light, being made of pasteboard. The armour of King Henricus Octavus was covered with red satin and splendidly embroidered with gold. . . . From thence we went to what is held to be Julius Cæsar's dining rooms,² and afterwards mounted the Tower covered all over with lead. There stood seventeen heavy cannon, which the Earl of Essex³ had brought from Cales Males (Cadiz), pointing towards the river and new town. Among them was one Saxon piece.

1610. Zingerling gives no details of the Armouries, and merely states that he saw many guns taken from Cadiz in Cæsar's Tower.⁴

1613. In the description of the visit of John Ernest Duke of Saxe-Weimar, his secretary⁵ only refers to the two wooden cannon noticed on page 22, which appear to have been among the most notable of the exhibits in the seventeenth and eighteenth centuries.

1625—1628. The travellers Jean Fontaine and Louis Schönbusch give the following account of their visit to the Tower⁶ :

The Great Tower, built by Julius Cæsar, is between four others. There is a round cannon which shoots seven balls from seven different barrels, and that at one discharge, and there is another square piece which shoots three balls at one discharge from three different barrels.⁷ Also there are two pieces, cannons of wood bound with hoops of iron, which Henry VIII used before Boulogne.⁸ Here we saw also the arms of Henry VIII,⁹ of the Duke of Lancaster,¹⁰ of the Earl of Suffolk¹¹ and of other lords.

1638. A Student of Altdorf¹² describes in his Journal a visit to the Tower, which, he states, was called by the British "Bringwon and Towgwin." He saw many large pieces of ordnance on the roof of the White Tower and a large collection of staff weapons and firearms. He writes : "Amongst others are the weapons of Henry VIII, some suits of armour as used for ballets¹³ and a very strange one which a fool is said to have worn."¹⁴ The latter item certainly refers to the helmet which, up to the beginning of the nineteenth century, was ascribed to Will Somers, the jester, and the former seems to indicate that certain suits were at that time shown as pageant or "masking" armour. If this is the case, it is the earliest reference

¹ One of these shields in the Collection (V, 43) is of faceted steel, which is probably the piece referred to. The other shields of the same type are mounted on wood.

² Possibly the first floor or "Banqueting Hall" of the White Tower.

³ Robert Devereux, second Earl of Essex ; defeated the Spaniards at Cadiz 1596. The guns cannot now be traced ; possibly they were destroyed in the fire of 1841.

⁴ Justus Zingerling, *Itinerarium Gallicæ*, etc., 1616. See also note 3.

⁵ J. Neumayer von Ramssla, *Reise in Frankreich England und Niederland*, Leipzig, 1620.

⁶ Copenhagen Ny. Kgh Saml. 369, 4°.

⁷ XIX, 17.

⁸ The guns "Policy." (See page 22.)

⁹ II, 6, 7, 8.

¹⁰ II, 22. IV, 2.

¹¹ II, 9. VII, 550.

¹² Bod. Lib. add. MS. B. 67.

¹³ Possibly the "Engraved suit," II, 5.

¹⁴ IV, 22.

to such a tradition, and goes far to show that Meyrick's opinion as to the "Masking armour" of Henry VIII was wrong, and that Mr. Porrett was right after all (pages 60, 93). The student also describes the gun called "Policy,"¹ on which was an inscription,

QUOD OPUS EST MARTE CUI MINERVA NON DESIT.

the Horn of a Warder, "of fair length,"² tapestry, gold and silver candlesticks brought over by the King of Spain, and a large sword which Pope Julius III gave to Henry VIII. The historical accuracy of this description is faulty, for Julius only assumed the tiara in 1550, three years after the death of Henry. A two-handed sword is scheduled in the Inventory of the Regalia of James I, taken in 1604 (Exchr. T. R. Misc. Books, 86), which is described as a present to Henry VIII from the Pope, garnished with silver and gilt. There is no trace of such a sword in the Armouries at the present day, but a ceremonial sword, single and not two-handed, included in the Ashmolean Collection at Oxford, is described as a present from the Pope to Henry VIII. The earliest mention of this weapon is found in Hearne's diaries.³

1669. Cosmo III, Grand Duke of Tuscany,⁴ does not appear to have been much impressed with the armour in the Tower, for he dismisses it very shortly. He states that the Tower contained an armoury, in which various suits of arms were preserved, but they were neither very numerous nor very valuable. Among these were some of Henry VIII,⁵ of the Duke of Lancaster⁶ and of the Earl of Suffolk.⁷ He also saw the "arsenal" beneath the White Tower, which contained a large number of cannon. He notices especially two guns of cast bronze, which were made in the time of Elizabeth, and were to be sent to the King of Fez, to whom the Earl of Arundel was going on an embassy from Charles II.

In 1672 M. Jorevin de Rocheford⁸ visited the Tower, and described what were evidently in his time the most notable pieces in the Armouries :

The great arsenal consists of several great halls, and magazines filled with arms of all sorts sufficient to equip an army of an hundred thousand men. Our conductor shewed us a great hall, hung with casques and cuirasses for arming both infantry and cavalry ; among others were some which had been worn by the different kings of England during their wars ; they were all gilded and engraved in the utmost perfection. We saw the armour of William the Conqueror,⁹ with his great sword, and the armour

¹ See page 22.

² XVIII, 32 (?).

³ *Arms and Armour in the University of Oxford*, C. Foulkes.

⁴ Count L. Magalotti, *Travels of Cosmo III, Grand Duke of Tuscany*, London, 1821.

⁵ II, 5-8.

⁶ II, 22, IV, 2.

⁷ II, 9, VII, 550.

⁸ *Antiquarian Repertory*, Vol. IV.

⁹ II, 40, a late sixteenth century suit. All this armour appears to have been still in the White Tower.

of his Jester, to whose casque was fixed horns ; he had, it is said, a handsome wife.¹ Moreover, they shewed us a cuirass made of cloves, another of mother of pearl ; these two were locked up in a separate closet. We passed into another hall, and there was nothing but muskets, pistols, musketoons, bandeliers, swords, pikes and halberds, arranged in a very handsome order so as to represent figures of many sorts. We saw William the Conqueror's musket,² which is of such length and thickness that it is as much as a man can do to carry it on his shoulders. We descended from this room into another place, where there are magazines of cannons, bullets, powder and match and other machines of war, each in its particular place. But, after all, this is nothing when compared with that of Venice. It is true that I saw in a cabinet in the king's palace many arms, which, for their beauty and exquisite workmanship, surpassed the rarest in the arsenal of Venice. This was by permission of Monsieur de la Mare, the King's Armourer.³

1725. M. César de Saussure visited the Armouries of the Tower in the course of his travels through England, and describes them as follows⁴ :

Our guide conducted us into a large, square and very ancient edifice, at every corner of which is a square turret. In the centre of the building stands a tall pole, or staff, from which a standard, or flag, flies on holidays. . . . We saw the lower arsenals all filled with cannons of various sizes, with culverins, mortars and a quantity of implements of war of every description. In the upper arsenal,⁵ which we visited next, is a long and wide hall where weapons in sufficient quantity to arm fifty thousand men are kept in readiness and in the greatest order and cleanliness. We were told that two hundred men are daily employed in this work. We next entered another hall⁶ containing statues and figures of a score or so of ancient English kings and of several princes and generals, all on horseback in full armour, with helmets on their heads and lances in their hands ; the horses, richly caparisoned, seemed ready to rush into battle. These figures are made to resemble the original persons, and are of painted wood. Near the entrance of the hall is the figure of Henry VIII ; he is represented standing in his royal robes, with a sceptre in his hand, and this is said to be a good likeness of this celebrated king. If you press a spot on the floor with your feet you will see something surprising with regard to this figure ; but I will not say more, and leave you to guess what it is.⁷

1731 (*circa*). Don Manoel Gonzales⁸ visited the Armouries in the course of his travels through England. He describes the "Line of Kings," and mentions several mortars "made by one Cohorn, a Dutch engineer." He contests the theory that the White Tower was built by Julius Cæsar, and, in describing this building, states that great quantities of powder were stored there, and that "should such a prodigious quantity of powder take fire it must be of fatal consequence to the city as well as to the Tower."⁹

¹ IV, 22.

² XII, 17.

³ De la Mare was the King's private armourer.

⁴ *Letters of M. César de Saussure*, translated by Madame van Muyden, London, 1902.

⁵ Either the first or second floor of the White Tower.

⁶ The Horse Armoury, now "C Store." (See page 24.)

⁷ Ned Ward in the *London Spy*, 1753, coarsely describes the figure of Will Somers wearing the helmet with rams' horns (IV, 22), and both he and de Saussure notice the brayettes, in those days shown on the figures, with the freedom customary to that period. In Walpole's *Memoirs* (Vol. IV, 226) it is stated that these and other offences against modesty in the Armouries were stopped by the influence of Archbishop Secker in the middle of the eighteenth century. So prevalent was this freedom of writing on such matters that we find Thomas Boreman, in his *Curiosities of the Tower*, subscribed for by children in 1741, ending his description of the Armouries with an indelicate rhyme on the subject of Henry VIII's brayette. This piece (II, 8. J.) was returned from Windsor on July 22, 1914.

⁸ J. Pinkerton, *General Collection of the Best and Most Interesting Voyages and Travels of the World*, 1808-1814.

⁹ In the year 1708 there were 3,000 barrels of gunpowder stored in the White Tower (*New View of London*, E. Hatton.)

1766. Le Rouge,¹ like most visitors at this period, was impressed by the trophies of arms which have been referred to under the description of the Grand Storehouse. He mentions a mortar that fired a bomb weighing 200lb. and one that fired nine bombs. He also alludes to "une torture d'une singuliere invention, mais on ne s'en sert point." It is impossible to say precisely what this instrument was, but it is probable that this was the remains of the rack which has been noticed on page 8. He also describes a cannon made for Prince Henry at a cost of £200, a diving bell, cannon taken from Monmouth's troops in 1689, and a portable forge used by the "Mareschal" when on the march. The fee for seeing the Armouries is given as 3 sols.
- 1814, June 11. The King of Prussia, his sons and a son of Marshal Blucher visited the curiosities of the Tower.²
- „ On Thursday, June 23, the Emperor of Russia, his sister, the Grand Duchess, the Duke of Oldenburg and the Prince of Wurtemberg visited the Tower. One who was present states that they were amazed at the collection of arms, both ancient and modern, and that the Emperor declared "that it was worse than folly to think of subjugating a country with such a store."³
1830. The only account of a British Sovereign visiting the Tower and its Armouries in State is to be found in *The Times* of August 6 of this year, when William IV and Queen Adelaide accompanied by Prince George of Cumberland, and attended by the Master of the Horse, Earl Cathcart (Gold Stick-in-Waiting) and Colonel d'Este (Equerry-in-Waiting). They were escorted through London by a full escort of the Life Guards, and were received at the Tower with a Royal Salute from the batteries on the wharf. At the entrance the party was received by the Duke of Wellington (Constable), General Loftus (Lieutenant) and Sir F. Doyle (Deputy), with whom was the Lord Mayor and the Prussian, Danish, Swedish and Hanoverian Ministers. Most of the time was spent in the Grand Storehouse, from the balcony of which building the Queen viewed an inspection of the garrison by the King, who wore a Field-Marshal's uniform. The Royal visitors appear to have enjoyed their visit greatly, and the King on leaving invited himself to lunch for a future date, when he could see the objects of interest in the Tower with less ceremony.
1844. In the course of his strenuous and wonderfully complete progress through England, Wales and Scotland, which occupied from May 29

¹ Le Rouge, G. L., *Curiosités de Londres et de l'Angleterre*, Bordeaux, 1766.

² *England's Triumph*, London, 1814.

³ *The London Spy*, December 3, 1831; the date is given wrongly as 1815 instead of 1814. This publication is very different from the coarse guide of the same name by Ned Ward.

to August 5, King Frederic Augustus of Saxony visited the Tower on June 15, but his diarist does not appear to have been much impressed with the buildings. The party were conducted round the Armouries by "the heralds-at-arms" (Tower Warders), who repeated "mechanical tales," much to the amusement of the visitors. Even to this Royal visitor and his party many buildings of the Tower were closed, and much disappointment was caused by the fact that they were not allowed to inspect the "Bloody Tower," which is now open to the general public without any restrictions.¹

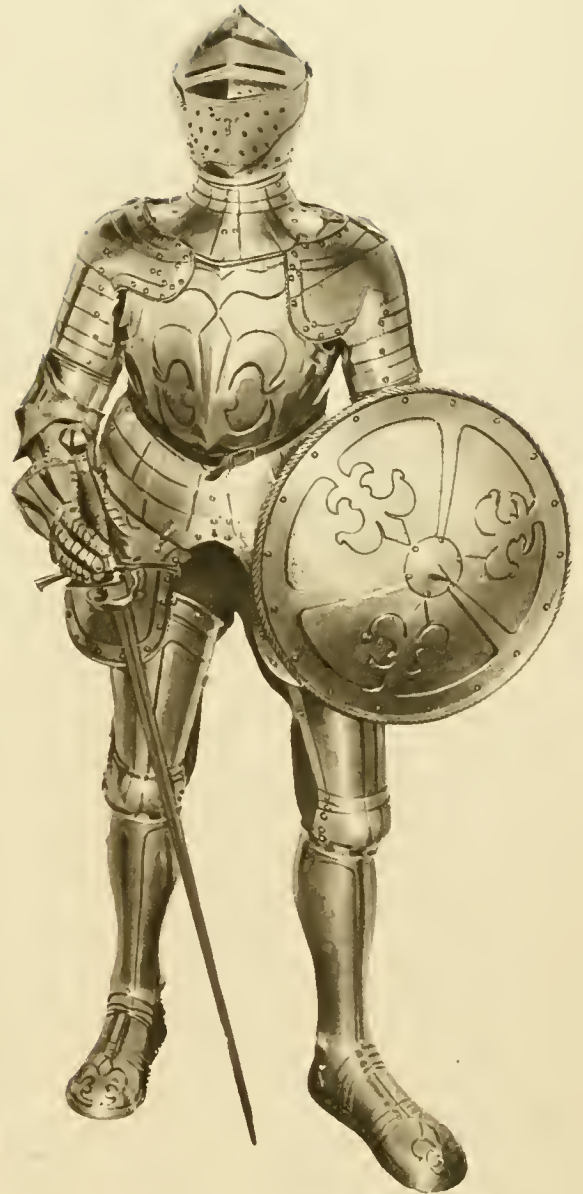
1854. On March 1 Her Majesty Queen Victoria and Prince Albert, accompanied by the Prince of Wales, the Princess Royal and Princess Alice, and attended by Viscountess Jocelyn, Lady Caroline Barrington, Colonel the Hon. C. Grey and Captain the Hon. Dudley de Ros, visited the Tower. The Queen drove in semi-state and Prince Albert and the Prince of Wales rode on horseback. The Royal party were conducted over the Tower by Lord de Ros, Major of the Tower, and a guard of honour was furnished by the Warders in full State dress.²
1914. On April 26 Her Majesty the Queen visited the Tower, accompanied by Princess Mary, Prince Henry and Prince George, and attended by Sir Douglas Dawson, Comptroller of the Lord Chamberlain's Department. The Royal party were received at the entrance by Field-Marshal Sir Evelyn Wood (Constable), Lieutenant-General the Hon. Sir Frederick Stopford (Lieutenant) and Major-General Pipon (Major and Governor of the Tower), the Warders forming a guard of honour in full State dress. General Sir Arthur Wynne (Keeper of the Regalia) conducted the visitors over the Jewel House, and the Royal party afterwards inspected the Armouries under the guidance of the present Curator.

¹ *The King of Saxony's Journey*, Dr. G. Carns, 1846.

² *The Times*.



D. 22



D. 24

Armour: (middle of XVIth century.)

INVENTORIES, GUIDE BOOKS AND WORKS DEALING WITH
THE ARMOURIES OF THE TOWER.

THE earliest existing numbered Inventory or Catalogue was made by John Hewitt, the noted antiquary, in the year 1859. In this work he quotes an Inventory of 1821, which seems to have been destroyed with other papers of the Ordnance Office shortly after the Records were transferred from the Tower to the Record Office. Except this schedule there is nothing extant of a later date than the Valuation of 1691 which gives no Inventory numbers. Hewitt divided the Collection into twenty Classes, to which Viscount Dillon added an additional class in 1895. In 1914, as has been noted in the Introduction to the present work, the objects in Classes I, XV-XVII inclusive were transferred to the British Museum as having no historical connection with the Armouries of the Tower and this transfer necessitated a rearrangement of the sub-divisions. In view of the fact that students of Arms and Armour had, during the past fifty years, become used to the Class numbers of Armours, Helmets, Swords, etc., it was thought advisable to retain these and to fill up the classes left vacant, transferring to them certain items which formerly had been either collected under the heading "Miscellaneous" or had not been scheduled at all. The subjoined lists will show the old and new classifications.

1859-1914.

1. Prehistoric, Greek and Roman Arms, etc.
2. Armours.
3. Details of Armours.
4. Helms, Helmets, etc.
5. Shields.
6. Horse Armour and Furniture.
7. Staff Weapons.
8. Maces.
9. Swords
10. Daggers.
11. Crossbows.
12. Firearms.
13. Powder-Flasks, etc.

1914.

1. Inventories, Works of Reference, Prints, etc.
2. Armours.
3. Details of Armours.
4. Helms, Helmets, etc.
5. Shields.
6. Horse Armour and Furniture.
7. Staff Weapons.
8. Maces.
9. Swords.
10. Daggers, Bayonets and Knives.
11. Crossbows.
12. Firearms.
13. Powder-Flasks, etc.

1859-1914.

14. Combined Weapons.
15. Indian and Asiatic Arms, etc.
16. African Arms, etc.
17. American Arms, etc.
18. Miscellaneous Objects.
19. Ordnance.
20. Shot and Shell.
21. Addenda.

1914.

14. Combined Weapons.
15. Instruments of Punishment.
16. Uniforms, Colours, etc.
17. Carved Figures, Horses, etc.
18. Miscellaneous.
19. Ordnance.
20. Shot and Shell.
21. Modern Copies.

The subjoined are the principal Inventories and Surveys of the Armouries preserved in the Record Office and elsewhere. Certain records of a like nature are quoted by Hewitt in his Catalogue of 1859 as being in the Tower at that time. If they existed in the Record Office, the contents of which were removed to their present building in 1856, they would doubtless have been scheduled in the valuable Calendars of State Papers. As this is not the case one cannot but surmise that they were destroyed, with many other historical documents, as useless rubbish. One of the most interesting of these would be the Survey of 1821, as it was the last record of the chaos which existed in the Armouries before Meyrick reorganised the Collection in 1825-7¹. Wherever there is no doubt as to the authenticity of the piece, references to the Inventories in the Record Office are given below each entry of the Catalogue, and the traditions of past ages, even when they have no historical value, are also given to show the opinions of former keepers of the Armouries respecting the specimens under their charge. All the guide books up to the year 1827 follow the nomenclature used in the Inventories of the seventeenth century, and between the years 1827 and 1894 Hewitt's Catalogue is the authority quoted. After the latter date Viscount Dillon brought his erudition to bear, and corrected many errors which had arisen.

The Inventories marked * are referred to under the several class headings of the present work.

- 1455, May 20. Inventory of the Armouries taken by John Stanley of Wyrall, Sergeant of the Armoury.²

(Rot. Pat. 33, Hen. VI, memb. 7.)

1523. List of Ordnance at the Tower. (S. P. Hen. VIII, § 28, 221.)

- *1542. Survey of Weapons in the Greenwich Armouries.

(S. P. Dom., Letters and Papers, Hen. VIII, 1542.)

¹ Some of the Store lists of this and later periods describe historical cannon richly decorated as "Gun, bronze, one," portions of early armour as "Armour, man, parts of," and staff weapons of all types as "Spears, various."

² Transcribed in Meyrick's in *Antient Armour*, II, 119, and in Britton and Brayley's *Memoirs of the Tower*, 259.

- *1542. Survey of Weapons in the Tower.
(Brit. Mus., Harl. MSS., 1419.)
- *1547. Inventory of Arms, Armour, Ordnance, etc., at the Tower,
Greenwich, Westminster, etc.
(Society of Antiquaries, Brander MS.)
- 1558, December 26. Account of Armour Remaining at the Tower.
(S. P. Dom., Eliz. I, 44.)
- 1559, September 13. Inventory of Ordnance at the Tower.
(*Archæologia*, XXXVII.)
- „ October 13. Inventory of Armour at the Tower.
(*Archæologia*, XXXVII.)
1561. Remains of Armour in the Queen's Armouries.
(S. P. Dom., Eliz., XVI, 43.)
- *1561. Inventory of the Queen's Armouries.
(Brit. Mus. Harl. MSS. 7457, also in Lord Dartmouth's Collection.
This volume has for frontispiece the portrait of Sir George Howard
reproduced at the beginning of the present work. The binding is of
blue velvet, with corners and clasps of silver engraved.)
- 1564—1565. Remains of Armour in the Queen's Armouries.
(S. P. Dom., Eliz., XXXV, 18, XXXVI, 16.)
1578. Estimate of the Remains in the Office of the Ordnance.
(Soc. Ant., *Ordinances of the Royal Households*, p. 272.)
1596. Account of the Armour in the Tower.
(S. P. Dom., Eliz., CCLXI, 61.)
- 1601, May 7. Inventory of Armour and Stores in the Tower.
(Audit Office, 2299-3.)
- *1611. Remains of His Majesty's Armouries, taken on the death of
Sir Henry Lee, Master of the Armouries.
(S. P. Dom., Jac. I, LXIV, 71.)
1625. List of Armours made for certain Nobles and Gentlemen.
(S. P. Dom., Car. I, XIII, 96.1.)
- *1629. Remains of the Armoury taken on the death of Sir William
Cope, Master of the Armoury.
(S. P. Dom., Car. I, CXXXIX, 94.)
1631. Survey of the Armouries.
(*Archæologia*, XXXVII.)
- *1660. Survey of the Armour in the Tower.
(Lord Dartmouth's Collection, printed in *Arch. Journ.*, IV.)
- 1675—1678. Survey of the Armouries.
(Exhibited in the Armouries. See page 83.)

76 THE ARMOURIES OF THE TOWER OF LONDON.

- *1676. Survey of the Armour, Ordnance, etc., in the Tower.
(Record Office, W.O. 55-1709.)
- *1683. Account of the Armour in the Tower.
(Lord Dartmouth's Collection.)
- *1683. Survey of the State of the Armour, Ordnance, etc., in the Tower.
(Record Office, W.O. 55-1722.)
- 1688—1691. Valuation of the Armour, Ordnance, etc., in the Tower
and other fortresses.
(Brit. Mus. Harl. MSS. 7459.)¹
- 1821. Inventory of the Armouries. (This appears to have been
destroyed with other papers some years ago by the Ordnance
Office.)
- 1859—1870. Catalogue of the Armouries by John Hewitt.
- 1910. Illustrated Guide to the Armouries, by Viscount Dillon, Curator.
(This is not given under the heading of "Guides" as it is an
almost complete catalogue of the Collection.)

PRINTED WORKS DEALING WITH THE ARMOURIES OF THE TOWER OF LONDON.

In the early guide books the printer's or publisher's name is given
when no author's name is cited.

- 1657. Howell. Londinopolis.
- 1704. Ward, Ned. The London Spy.
- 1708. A New View of London. E. Hatton and J. Nicholson.
- 1711. Erndtel,² Christ. Hen., M.D. De Intinere suo Anglicano et
Batavo Annis 1706 et 1707.
- „ English edition of the above.
- 1721. British Curiosities of Art and Nature. Sam. Illidge.
- 1730. Burton, R. A New View of London and Westminster.
- 1733—1735. Seymour, Robert. Survey of London and Westminster,
Vol. I.
- 1741. Curiosities of the Tower of London. (Subscribed for by
children.) Thomas Boreman.
- 1742. "A Citizen." A New and Complete Survey of London, Vol. I.

¹ Harl. MSS., 7448-7463 contain "The State of Stores at the Tower," 1687-1693.

² Botanist and antiquary, Chief Physician to the King of Poland, died 1734.

- 1744—1787. A Historical Description of the Tower of London.
J. Newbery.
1756. Maitland, W. History of London, Vol. I.
1763. The Foreigner's Guide to London (English and French).
H. Kent.
1769. Description Historique de la Tour de Londres. Newbery and Carnan.
- „ B——, M. de. La Guide d'Angleterre.
- „ La Guide des Etrangers. Joseph Pote.
1770. Chamberlain, H. A New and Complete History and Survey of London.
- 1771, 1776. Historical Account of London and Westminster, Part I.
Newbery and Carnan.
1773. Noorthouck, J. History of London, Westminster and Southwark.
1776. Fielding, Sir John. A Brief Description of the Cities of London and Westminster.
- 1784, 1788. An Historical Description of the Tower of London.
Thomas Carnan.¹
1791. Smith, J. T. Antiquities of London. (Plates only.)
1794. Thornton. History of London and Westminster.
1796. Skinner, R. History of London.
- 1802, 1807, 1818. The Picture of London. R. Philips.
1805. Hughson, David. London, Vol. II.
1809. Ackerman, R. The Microcosm of London. (Plates and short descriptions.)
1811. Barjand and Landon. Description de Londres.
- 1821, 1825. Bayley, J. History and Antiquities of the Tower of London.
1821. A New and Improved History and Description of the Tower of London. G. Offor, Tower Hill.
- 1819, 1824, 1841. Leigh, Samuel. New Picture of London.
1827. A New and Improved History and Description of the Tower of London. J. King.
1830. Britton, J., and Brayley, E. W. Memoirs of the Tower of London.

¹ Carnan successfully contested the claim of the Stationers' Company to print all almanacks in 1775.

1831. The Public Buildings of the City of London. J. Harris.
1837. Allen, Thomas. The History and Antiquities of London, Vol. II.
- 1838, 1840. Wheeler, J. A Short History of the Tower of London. Sold at the Armoury Ticket Office.
- 1841, 1845. Hewitt, J. The Tower : Its History, Armouries and Antiquities.
1843. Knight, C. London, Vol. II.
- 1847—1849. Wheeler, J. A Short History of the Tower of London.
1849. Cunningham, Peter. Hand-book for London.
1851. Blanchard, L. Pocket Guide to London.
1854. Pictorial Hand-book of London. Bohn.
- 1855, 1867. Timbs, J. Curiosities of London.
- 1859, 1865. Wheeler, J. Sketches of the Tower of London. Sold at the Armoury Ticket Office.
- N.D. (*circa* 1860). The People's History of the Tower of London.
1862. Guide de la Tour de Londres. Clark and Co.
1866. Ros, Lieutenant-General Lord de. Memorials of the Tower of London.
1870. Der Tower von London. Clay, Son and Taylor.
- 1881—1887. Walford and Thornbury. London, Old and New, Vol. II.
1884. Harman, A. Sketches of the Tower of London.
- 1885, 1886. Loftie, W. J. Authorised Guide to the Tower of London. H.M. Stationery Office.
1887. Guide to London. Nelson. (Incorrect.)
1891. Wheatley, H. B., and Cunningham, P. London Past and Present.
- N.D. (*circa* 1885). Guide to the Tower. Stead.
1900. Guide to London. Ward, Lock and Co. (Incorrect.)
- 1897, 1903, 1904, 1912. Viscount Dillon, and Loftie, W. J. Authorised Guide to the Tower of London. (H.M. Stationery Office.)¹
1914. Viscount Dillon, Loftie and ffoulkes. Authorised Guide to the Tower of London. (H.M. Stationery Office.)

¹ After 1897 "Guides to London" reproduce the "Official Guide to the Tower."

INVENTORY OF THE ARMOURIES

1915

(VOLUME I: DEFENSIVE ARMOUR, ETC.)



IL 32



IL 29

German Armour (middle of XVIth century.)

CLASS I. INVENTORIES, PRINTS, BOOKS, ETC.

I. Inventory of Arms, Armour, etc., in the
Tower of London, 1675-1679.

This volume measures 21in. by 15in. by 11in. thick and consists of 914 pages bound in millboard covered with sheepskin sewn with catgut and green silk. It is labelled on the back "Ledger, Receipts, Returns, and Issues, from June 21, 1675, to September 3, 1679." The paper bears the watermark of a shield charged with a fleur de lys under a crown and the monogram W.R. under an heraldic crampon. It is one of the inventories quoted by Hewitt in his catalogue of 1859 as being preserved in the Tower. All the other records cited by him have either been transferred to the Public Record Office or were destroyed shortly after he produced his work.

In the year 1914 this historical record was brought to light and is now exhibited in the upper room of the Armouries.

From the dates given it is probable that this Survey was taken by order of Sir Thomas Chicheley, Master of the Ordnance, under a warrant of inspection dated 1671. Colonel William Legge, the last Master of the Armouries, died in 1670 and after this date the custody of the Armouries was handed over to the Ordnance Office.

The several items are given with figures in parallel columns showing the numbers received, issued, and unserviceable. Some are entered at random and some alphabetically; but for convenience of reference they have been placed under definite headings. The attributions of many of the armours are often wrongly given owing to the lack of knowledge on such subjects displayed by the custodians of the period.

ORDNANCE, ETC.	Cannon of eight. ¹	Demy cannon. ³
Cannon of seven. ¹	Sakers. ²	Minions. ⁴

¹ Cannon of 7,000 lbs. and 80,000 lbs., bore 7 in. and 8 in., shot 60 lbs. and 42 lbs.

² Weight 1,500 lbs., bore 3½ in., shot 5 lbs., point blank range 360 yds.

³ Weight 3,300 lbs. (S. P. Dom., Car I, XII, 97, 1625.)

⁴ Weight 1,100 lbs.

ORDNANCE, ETC.

Falcons.⁵
 Falconettes.⁶
 Murderers.⁷
 Hand cannon.
 Sling pieces.
 Twenty-four pound-
 ers.
 Twelve pounders.
 Eight pounders.
 Six pounders.
 Three pounders.
 Cannon periors.⁸
 Rabonettes.⁹
 Culverings.¹⁰
 Demy culverings.¹¹
 Gun of wood.¹²
 Beds (for guns).
 Capsquares.¹³
 Coins.
 Crowlevers.
 Gages for shot.
 Flints.
 Firestones.
 Ladles.
 Ladle hooks.
 Linch pins.
 Linstocks.
 Powder horns.
 Port hooks.

Priming irons.

Rammers.
 Rope sponges.
 Ship carriages.
 Spikes.
 Sponges.
 Tackle hooks.
 Tampions.¹⁴
 Wad hooks.

SHOT AND SHELL.

Chain shot.
 Crossbar shot.
 Fire shot with chains
 of wire.
 Langed shot.
 Long shanked hollow
 fire shot.
 Shells.
 Granado shells.¹⁵

SUNDRIES.

Axes.
 Balls of copper.
 Baskets.
 Beams.
 Bedding.
 Bolermoniac.¹⁶
 Bolsters.
 Books.

Borers.

Brandy.
 Breechings.
 Bridges, rolling.
 Brimstone.
 Brushes.
 Buckets.
 Buckles.
 Budge barrels.¹⁷
 Canvas.
 Candles.
 Caps for pioneers.
 Capstells.¹⁸
 Carpets.
 Carts.
 Chains.
 Charcoal.
 Chests.
 Chisels.
 Clams.¹⁹
 Clothes.
 Clouts.
 Coal.
 Cocks for muskets.
 Commanders.²⁰
 Compasses.
 Crooks.
 Crosses for hanging
 armour.²¹

⁵ Weight 800 lbs.⁶ Weight 500 lbs.⁷ A small mortar.⁸ Cannon to shoot stones.⁹ Weight 200 lbs., bore $1\frac{1}{2}$ in., $5\frac{1}{2}$ ft. long.¹⁰ Weight 3,000 lbs., bore $4\frac{1}{2}$ in.¹¹ Bore $5\frac{1}{2}$ in., length 10-13 ft.¹² The Gun "Policy" (see pages, 22, 65, 69.)¹³ The caps over the trunnions.¹⁴ Plug for the muzzle of the gun.¹⁵ In June, 1667, Evelyn went with the King to Greenwich to see these shells tested, the best were made of cast iron.¹⁶ Salamoniac (?)¹⁷ Powder casks with a long neck (Smith's *Seaman's Grammar*, 1627.)¹⁸ Capstans.¹⁹ Clamps.²⁰ Large wooden mallets (Moxon's *Mechanical Exercises*, 1627.)²¹ Stands of this type are still in use in the Armouries.

SUNDRIES.

Cullenders.²²

Curtains.

Dibbles.

Disparts.²³Dogs of iron.²⁴Dowldges.²⁵Dryapent.²⁶

Engines.

Fatts.²⁷

Felt.

Fetters for horses.

Flags (of regiments).

Forelocks and keys.²⁸

Gimlets.

Gins.²⁹

Glue.

Grapnels.

Grindstones.

Gysiacum.³⁰

Halyards.

Hampers.

Handscrews.

Harness for men and horses.

Hatchets.

Hide.

Hinges.

Hose.

Hogsheads.

Hoops.

Horses of wood.³¹

Hose of leather (for water).

Hurters.³²

Ink.

Kettles.

Knives.

Lanterns.

Lard of hogs.

Lead.

Legs.³³

Levels.

Lines.

Mallets.

Marlin.³⁴

Metal, bell-.

Muscovia lights.³⁵

Nails.

Naves of wheels.

Needles.

Nippers.

Nuts.

Oil.

Paper royal.

Parchment.

Peltanes.³⁶

Picks.

Pintles of iron.³⁷

Pontoons.

Pumps.

Quills.

Red coats.³⁸

Ropes.

Rundlets.³⁹

Saddles.

Sails.

Saltpetre.

Sarcenet.

Scathings.⁴⁰Searchers.⁴¹

Sheepskins.

Shivers.

Shoes.

Skidds.

Sledges.

Slices.

Soap.

²² Sieves.²³ "A Dispart is a small stick or wyre set perpendicular on the muzzle-ring of a gun of such length that the top of it may be level with the upper part of the basering." (Smith's *Seaman's Grammar*, 1692), a foresight.²⁴ Fire-dogs, or possibly small guns.²⁵ Dowel-pins, coaks of wheels.²⁶ Uncertain.²⁷ Vats.²⁸ Wedges to keep bolts in place (Smith's *Seaman's Grammar*), also, possibly padlocks.²⁹ Cranes for hoisting, also fetters, bolts, and machines of all sorts.³⁰ Plaster of Paris.³¹ For showing armour. (See Class XVII.)³² The shoulder of a wheel axle, also a beam to check the motion of a gun-carriage in front and behind.³³ The poles of Sheers.³⁴ Fine twine or rope.³⁵ Lanterns fitted with talc or "Muscovy glass."³⁶ Shields (?)³⁷ Rudder-hooks, also bolts to stop the recoil of a gun.³⁸ The Regiments of the Parliament wore red, blue, grey, green and black coats, the livery colours of their Colonels. (*Fairfax Correspondence*, Vol. II, 415.)³⁹ Sieves or riddles.⁴⁰ Uncertain.⁴¹ Sounding irons, also an instrument for testing a gun after discharge, a probe.

SUNDRIES.

Sockets.
Soda.
Solder.
Spilters.⁴²
Standards of regiments.
Statues of wood.⁴³
Steelyards.
Stoves.
Tallow.
Tanned hides.
Tents.⁴⁴
Thread.
Trunks.
Tubs.
Turpentine.
Umber.
Verdigris.
Vyses.⁴⁵
Waggons.
Wedges.
Wheels.
Wick.
Wire.

INSTRUMENTS OF PUNISHMENT.

Bilboes.⁴⁶

Collar of torment.⁴⁷

Handcuffs.

Heading axe.⁴⁸

Rack.⁴⁹

Shackles for prisoners.

WEAPONS, ETC.

Ammunition swords.

Battle axes.

Boar spears.

Bills.

Crossbow, old.

ARMOURERS' TOOLS.

Anvils.

Bellows.

Bickirons.

Fileing tongs.

Hollowing block of iron.

Hammers.

Mill-hammer.

Shears.

Sledges.

Spades.

Stone to grind coal-
lers.⁵⁰

WEAPONS.

Clubs, Danish.⁵¹

Firelocks.

Halberds.

Javelins, Spanish.

Lances of Henry VII
and Charles Bran-
don.⁵²

Lances of Champion
of Charles II.

Maces.

Morning stars.⁵³

Musket rests.

Palisadoes.⁵⁴

Partizan, rich Eng-
lish.

Poleaxes, Spanish.

Rancons, Spanish.

Shields of wood of
Henry VII and
Charles Brandon.

Shields of wood and
leather.

Swords and hangers.

Targets, with and
without pistols.⁵⁵

Two-hand swords.

Walking staff of Henry
VIII.⁵⁶

⁴² Spelter, hard solder.

⁴³ Possibly the figures "Gin and Beer." (See XVII, 5, 6.)

⁴⁴ These include French tents, decagon, duodecagon, and horse tents.

⁴⁵ Vices.

⁴⁶ Shackles for prisoners. (See XV, 7.)

⁴⁷ XV, 4.

⁴⁸ XV, 1.

⁴⁹ See page 8.

⁵⁰ Uncertain.

⁵¹ Holywater Sprinkle. (VIII, 1-2; see also page 30.)

⁵² VII, 550.

⁵³ See Note 51.

⁵⁴ Spikes for defence against cavalry. (See XIV, 16.)

⁵⁵ V, 34-43.

⁵⁶ XIV, 1.

ARMOUR.

Under this heading are found Curassier armour, burgonets, brigandines. Harquebus armour, breasts, potts, pauldrons, sleeves of mail, coats of mail, morions, tilting armour, chanfrons, etc. ; also :

Armour of the Toyras provision.⁵⁷

Masking armour, said to be King Henry VII's.⁵⁸

Armour cap-a-pe, rough from the hammer, said to be King Henry VIII's.⁵⁹

Armour of Lord de Courcy.⁶⁰

King Henry VIII's cod piece.⁶¹

Hearse or large helmet of John of Gaunt.⁶²

Large white armour of John of Gaunt.⁶³

Antick head piece with ram's horns, said to be Will Somers'.⁶⁴

SUNDRY COMPLEAT ARMOURS AND OTHERS.

Upon a Horse statue of Wood compleat Armour capape White and Plaine wth a Gauntlet for William $\frac{e}{y}$ Conqueror : $\frac{e}{y}$ Horse furniture being a Shaffron Crinett for $\frac{e}{y}$ neck wth Sadle and Bridle.⁶⁵

Upon a like Horse, Armour Capape Whte Engraven & Parcel GUILT made for King Edward $\frac{e}{y}$ 3rd, $\frac{e}{y}$ Horse furniture being a Shaffron Crinett for $\frac{e}{y}$ neck, Brestplate, Buttocks of $\frac{e}{y}$ same, one old Sadle and Bitt.

Upon a like Horse Armour Capape wth Gauntlet and Pass Guard made for King Edward $\frac{e}{y}$ 4th, $\frac{e}{y}$ Horse furniture being a Shaffron, Brestplate, Buttocks and old Sadle.

Upon a like Horse Armour made for King Henry $\frac{e}{y}$ 6th, consisting of a headpeece, Back, Brest, a pair of Pouldrons & Vambraces, a Pr of Graves, a Gauntlet & passguard, $\frac{e}{y}$ Horse furniture being a Shaffron, Crinett, old Sadle and Bitt.

Upon a like Horse, Armour Capape Damasked wth Gold made for King Henry $\frac{e}{y}$ 7th ; $\frac{e}{y}$ Horse furniture being a Shaffron, Crinet for $\frac{e}{y}$ neck, brestplate & buttocks of the same, Sadle, Stirrops and bitt.

Upon a like Horse, Armour Capape, white and GUILT made for King Henry $\frac{e}{y}$ 8th : $\frac{e}{y}$ Horse furniture being a Shaffron, GUILT brestplate and Buttocks plaine, One Old Sadle and Bitt.⁶⁶

⁵⁷ III, 184.

⁵⁸ II, 5. (?)

⁵⁹ II, 6.

⁶⁰ Made up of XVIth and XVIIth Century pieces.

⁶¹ II, 8, J.

⁶² IV, 2.

⁶³ II, 21.

⁶⁴ IV, 22.

⁶⁵ II, 40.

⁶⁶ II, 8.

Upon a like Horse, Armour Capape white & plaine wth Gauntlet made for Charles Brandon Duke of Suffolk, $\frac{e}{y}$ Horse furniture being a Shaffron brestplate & buttock of the same, a Sadle plate Guilt wth Sadle, bitt and bridle.⁶⁷

Upon a like Horse Compleat Armour Capape engraven wth $\frac{e}{y}$ Ragged Staff wth a maine guard & passguard made for $\frac{e}{y}$ Earle of Leicester, $\frac{e}{y}$ Horse furniture being a Shaffron Crinett, and Brestplate of $\frac{e}{y}$ same, Sadle, Bitt & raynes.⁶⁸

Upon a like Horse, Compleate Tilting Armour Capape richly guilt part engraven & part damasked wth two gauntlets & one guilt Grandguard, made for Prince Henry, $\frac{e}{y}$ Horse furniture being a Shaffron of $\frac{e}{y}$ same, an old leather Sadle, and a Bitt.⁶⁹

Upon a like Horse, Curazeer Armour richly guilt and engraven wth a pair of Graves made for King Charles $\frac{e}{y}$ 1st, the Horse furniture being a Shaffron of $\frac{e}{y}$ same, brestplate & buttock plaine, a Sadle plate and Bitt guilt, wth an old Sadle.

Small Rich Suite of Armour for Horse & foote richly guilt, wth bosses of Gold, and corded wth silver, consisting of Back brest, Taces, Murrion, close-headpce, Poldrons, Vambraces, wth a Gorgett, & Gauntlettes of each curazeere.

Armour made for King Charles $\frac{e}{y}$ 1st when young, Richly guilte and graven consisting of back, brest, Headpeece, Gorgett, Pouldrons & Vambraces, Culett, Cushes, Gauntlettes and Grandguard.⁷⁰

Small suit of Armour richly guilt & graven consisting of back, brest, Headpeece, a par. of short cushes, Poldrons, & Vambraces, Graves, & Knee Copps: a Pass Guard, grand Guard Vamplettes and Shaffrons.

Foote Armour Sanguined made for King Henry $\frac{e}{y}$ 8th Richly guilt consisting of back, brest, Taces, placket, Gorgett, & Burgonett, wth a Buff or Chinpeece for $\frac{e}{y}$ mouth.

Armour richly guilt and graven consisting of a back, brest, cushes, a pair of Knee Cops Gorgett & a pair of short Taces, a Burgonett wth a Buff, Murrion, a gauntlett, a Shaffron wth a pair of Guilt Steeles for a Sadle.

Armour Cappape richly guilt & graven made for King Charles $\frac{e}{y}$ 1st, wth Gauntlett and Shaffron of the same and Guilt Steeles for a sadle.⁷¹

⁶⁷ II, 9.

⁶⁸ II, 81.

⁶⁹ II, 89 (?)

⁷⁰ II, 90. (?)

⁷¹ II, 91.

Small Armour made for his now Majesty King Charles ^e_y 2nd when he was Prince, consisting of Back, Brest, Headpeece and Gorgett, all richly guilt.⁷²

Armour sent his now Matie. King Charles ^e_y 2nd. by ^e_y Great Mogull consisting of Back, Brest, Taces, Headpeece, Vizards and Peeces of Greves.⁷³

Curazeere Armour made for King Charles the 1st. on a High Cross.

2. Issue and Transit Notes, 1853-1858.

3. Issue and Transit Notes, 1858-1889.

4. Transit Notes, 1862-1870.

5. Issue Register, 1874-1888.

The Issue Registers, Nos. 2-5, record the later Issues of Arms, etc., for the Lord Mayor's Show and other Ceremonials. They also record the loan and transfer of regimental colours which were stored in the Armouries and were issued for decorative purposes.

6. Catalogue of the Armouries compiled by Order of the War Office, no date, probably about 1870.

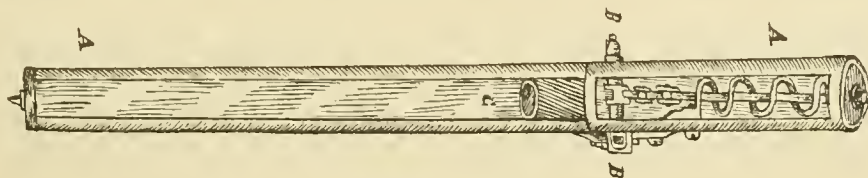
7. Warder's Book, giving numbers of parties taken round the Armouries, 1859-1861.

8. Catalogue of the Armouries, John Hewitt, 1859, 1870.

9. Catalogue of the Armouries, Viscount Dillon, 1893.

10. Manuscript Treatise on the Making of Arms, Armour, Etc., by Antonio Petrini, 1642. Transferred from the Library of the Patent Office, 17th July, 1914.

Arte Fabrice ovvero Armeria universale dove si contengono tutte le qualita e nature del ferro, con varie impronte, che si trovano in diverse Arme, cosi antiche, come moderne et varj segreti e Tempere, fatto da me Antonio Petrini.



SPRING GUN

Made by Antonio Petrini for King Charles I.

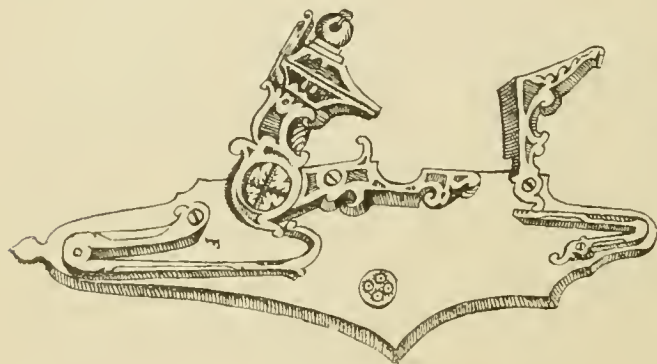
This volume consists of 122 pages, 11in. by 7³/₄in., bound in vellum boards, the paper bearing a water mark of the "tre monti." The handwriting of the text is very clear and there are no erasures or corrections in

⁷² II, 92.

⁷³ II, 127.

the whole treatise. A number of Armourers' marks are given in the text, drawn with the same ink and, in addition, there are several illustrations drawn in a permanent black ink showing gunlocks and mechanical contrivances, many of which are carefully executed.

A similar copy exists in the Magliabecchi Library, Florence, which has been quoted in Demmin's *Arms and Armour*, but this only contains the text and the Armourers' marks and has none of the illustrations. It may,



FLINT LOCK.
(From *Arte Fabrice*.)

therefore, be surmised that either the Florentine copy is the rough draft, or that it is a late copy of the work under consideration, which is obviously the completed treatise. The preface, of the usual sycophantic order in fashion at this period, is succeeded by a dissertation on iron, the countries in which it is found, and the methods of tempering and working it. In discussing this question

Petrini states that he intends to give

the marks of all armourers, but the magnitude of the task has evidently impressed itself upon him, for he subsequently writes that he will give only those that are well known. Most of those given were used by gunsmiths of the seventeenth century, among whom are found Lorenzo Comminazzo and Batistini Paratici. He gives three English marks which, up to the present, have not been traced to any existing weapons. Further on the author speaks of an armourer Piripe, maker of highly decorated armour, who cannot be identified with any known craftsman of the late sixteenth or early seventeenth century, and he bases his remarks upon the writings of Felitano Macedonico, an equally unknown writer. In the technical part of his treatise Petrini describes a spring gun made for King Charles I of England and gives some careful drawings of gunlocks, pistols, and combined weapons, such as swords and pistols, and swords and compasses. Under the heading of Ordnance he illustrates two cannon joined at the base-ring and set at an angle of 45deg. to each other, intended to fire shot joined by a chain. It would be interesting to learn from a practical experiment what happened to the chain on the discharge. Like other scientific writers of this period, the author concludes with the well-worn idea of perpetual motion attained by a water wheel which worked a pump and was fed by the water which it raised.

The remainder of this class consists of works of reference, lithographs, drawings, and photographs of the armour which will be found exhibited on the Gun Floor.



Armour. (late XVIth century.) II.40.

CLASS II : ARMOURS.

1. Armour (Middle of XVth Century) commonly known as "Gothic."—The sallade is open-faced, with no visor. It is probable that this existed formerly, but the holes in which the visor-pins turned have been filled up.¹ It bears the mark of Antonio da Missaglia (*circa* 1490),

repeated twice. The gorget, composed of several lames with wide shoulder-plates, is of later date, and does not belong to the armour. The breast is in two parts,



No. 1.

with shallow flutings on both plates, the upper portion bearing an armourer's mark. The back is of four parts, a narrow, central plate with two side plates riveted on and one lower horizontal plate articulated to the two side plates. The taces consist of four lames, the lowest being semicircular at its extreme edge. The besagues, or rondels, sixteen-sided in form, are hung from the gorget. The brassards only protect the outside of the



ARMOUR
(II. 1.)

upper and lower arm, the inside of which was defended by a shirt of mail. The elbow-cops are of the usual bracelet type, with slight flutings. The gauntlets are finely worked with pierced margins, gadlings on the knuckles and fingers, and long cuffs. The leg armour is restored.

¹ In the early nineteenth century it was apparently thought that all holes in armour were intended to receive rivets, and the existence of these for attaching linings of coverings was not studied. In some instances this "restoration" of rivets which had not formerly existed has quite altered the character of the armour.

2. **Fluted Armour (Early XVIth Century).** Plate I.—The armet is of four parts. The skull is finely fluted with roped crest. The cheek-plates, hinged on each side with embossed rims on their lower edges, are engraved in the centre of each with a rosette, which originally had holes for hearing which have been filled up with rivets at some period. The two plates are closed by a lynched pin. The visor has a straight front, with horizontal slits for sight and vertical openings for breathing, and is closed by a spring pin on the right cheek-plate. It bears the Nuremberg mark. The gorget is of four lames, with embossed upper edge. The breast is globose, with shallow, vertical flutings and plate gussets edged with bold cabling, and the back is of one plate with radiating flutings. The taces, tassets, and gardereins are all of four lames, each edged with roping. The pauldrons, both of the same size, of five plates each, fitted with high neck-guards, are hung to the cuirass by straps. The brassards, with wide elbow-cops, are hung in the same manner to the pauldrons. The gauntlets are of the mitten type, with high roped knuckle-plates and short cuffs. The cuisses are very wide, with large fan-plates on the knee-cops. The jambs and sollerets, which are broad-toed, do not belong to the suit. They have engraved borders similar in design to those found on II, 9. This suit was exhibited at one time as the armour of Henry VII. It is mounted with the horse armour (VI, 30, 65, 77, 84, 100, 101, 137, 138), which appears to belong to it.



No. 2.

3. **Armour,** of similar style to No. 1.—The salade has a fixed visor, with vision-slit, and bears an armourer's mark in front. The gorget of three lames does not belong to the armour, and is of later date. The breast is in three parts, the upper edges of each plate being slightly dentated. The top plate has shallow flutings following the sweep of the arm-openings. The back is also of three plates, with shallow, fan-shaped, vertical flutings. The armpits are protected by large besagues of octagonal form hung from the cuirass. The taces and gardereins, of three and two lames each respectively, have dentated upper edges. The tassets are pointed, and have shallow, vertical flutings. The brassards, bracelet elbow-cops, and gauntlets are fluted in a similar fashion to the cuirass. The leg-armour is made up of plates of the late fifteenth century and modern restorations.



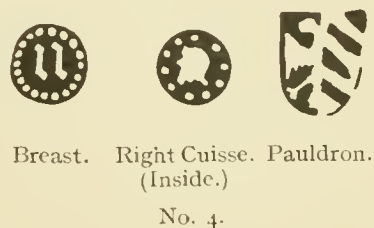
No. 3.

4. **Armour (Middle of XVIth Century).** Plate II.—The helmet is formed of three parts—the skull of globose form, forged in one piece, with roped crest and three narrow lames at the back of the neck; the visor, of the “bellows” type, with horizontal slits for breathing and sight; and the beaver. The spring-pin which closed the helmet has been replaced at some period by a rivet. The gorget is of four lames, with upper margins indented, and strongly roped edge. There are three short lames on each

side, set across the shoulders on the under-sides of the two parts of the gorget, and uniting them when closed. The lowest of these are shaped to fit the shoulders, and have a roped lower edge. This is an unusual addition, which is worthy of notice as affording increased protection at the parts where the back and breast are joined. The breast is of globose form, with plate gussets and cabled margins. It bears a mark, possibly of the Town of Innsbruck, on the inside. The back is in two parts, joined horizontally. The pauldrons, hung from straps on the cuirass, are of five plates each, the left chest plate being deeper than the right. Both have high neck-guards with roped edges, and both are stamped with the Nuremberg mark. The brassards are attached by straps on the inside of the pauldrons, and have large elbow-cops with roped edges. The right-hand gauntlet is wanting, and the left hand is protected by a mitten gauntlet. The taces are of six lames, indented on their upper margins like the gorget, and finished with a strong cable lower edging. The cuisses have extra upper plates, each of which has a cabled edge. The right cuisse is stamped inside with a mark, which is either that of the maker or of the purveyor of the armour plates. The stamping of an armourer's mark on the inside of a suit is very unusual. The knee-cops, with indented margins to the separate lames and large fan plates, are attached to the jambs by turning-pins. The right jamb bears the Nuremberg mark as above. The sollerets are broad-toed, and have deep, vertical slits at the back to take the spur. This figure is mounted with the horse armour, VI, 35, 79, 86.

Weight, 67lb. 4oz.

Purchased at the Bernal sale in 1855.



ARMOUR OF KING HENRY VIII.

5. Armour presented to King Henry VIII (1509–1547) by the Emperor Maximilian I, made by Conrad Seusenhofer (Plates III, IV).—This suit is mentioned in several of the Inventories of the Armouries under the title of “Masking” or “Masqueing” armour. Sir Samuel Meyrick considered that this was a contraction for “Damasked” or damascened armour, but it should be noted against this theory that, while armour in the Tower and other Inventories is often described as “damasked,” it is never described as “masking” except in the example before us. The word “damasked” was very loosely used in the sixteenth century, and was often applied to metal which was merely gilt and engraved, with no trace of what is known to-day as damasceneing. Mr. Porret, Armoury Keeper in 1828, suggested, in a letter to Sir Samuel Meyrick, now in the possession of Dr. Carrington Sykes, that the word should be

"Masqueing," or masquerading, and this is borne out by the entry in an Inventory of 1682 given below. While the construction and weight of the armour are quite adequate for use in war, its elaborate decoration and gilding rather suggest that it was used for pageants and parades. For sheer technique of armour-craft it cannot be surpassed, and may be accounted the finest suit in existence.

In the archives of Innsbruck mention is made of several armours ordered by Maximilian as presents for Henry VIII from the Court armourer Conrad Seusenhofer.¹

Between the years 1675 and 1825 this armour was attributed to King Henry VII and up to 1895 it was described as a wedding present to Henry from Maximilian. Henry's marriage took place in 1509, but no entries in the Innsbruck records treat of armour made for the King of England before the year 1511. The Innsbruck Archives have been printed in the *Jahrbuch des Kunsthistorischen Sammlungen*, Vienna, Vol. II.

The general design of the several pieces was evidently based upon an existing suit belonging to Maximilian, which will be found illustrated on

¹ 1511, May 10.—Sir Robert Wingfield, writing to Henry VIII from Innsbruck, says "Jerningham hath departed hence and hath sett all your harness . . . also that harness which the Emperor doth (send to your) Grace."—(*Brit. Mus. Cott. MS. Vitell. B. XVIII, 13.*) From this letter we learn that Jerningham had "sett" or arranged for the making of certain armours for the King. The only other entry that refers to this transaction shows that the negotiations took over a year to complete.

1511, June 1.—In the first place there are two suits of armour belonging to the King of England's Embassy prepared to measure, of which one is gilt and indeed altogether finished and the other I am now gilding. . . . Also there are now still five suits of armour in process of manufacture, namely for the King of England for his own use one suit in every way such as "Ylsings" (?) has been, together with one to be silver plated. (*Innsbruck, Missiven, 1511, fol. 20.*) The above letter from Seusenhofer relates also to armour being made for Maximilian which is described as "dryvaltig" or threefold, for war, for the joust and for parade.

1512, October 17.—Sir Richard Jerningham to Henry VIII from Newys (Vienna). "The harness is all bespoken." (*Brit. Mus. Cott. Vitell. B. XVIII, fol. 5.*)

1514, March 27.—The Government reports to the Emperor that they have undertaken to bear the cost of sending Conrad Seusenhofer to make armour for the King of England because the King might have need of him and it would be discreditable to the Emperor if the armour were not suitable. (*Missiven 1514, fol. 3.*)

1514, April 28.—Hans Seusenhofer receives for Expenses in the Netherlands, on his way to England to deliver the King of England's armour 80 gulden. (1514, fol. 101.) Passport for two trunks, in one the King of England's armour, in the other equipage for the journey from Augsburg to England. (*Innsbruck, Embieten und Befelch, 1514, fol. 119.*)

From the numerous entries which occur in the Innsbruck records of this period it seems probable that the above refer to the Engraved Suit, now under consideration. The moneys paid for the making, for lead, copper and tin, probably for solder used in the silver plating, and for silver and gold in every case relate to presents for several princes besides the King of England, so that it is impossible to discover the cost of each armour. The above Passport suggests that it was sent over at the end of April, and from the State Papers Domestic in the Record Office we find one entry which probably relates to its arrival.

1514, May 7-14.—Payment "to one of the Emperor's Servants" £6 13s. 4d.

The last entries that concern this armour are found in the Innsbruck Archives.

1514, May 1.—Hans von Wendt, Court Carpenter, receives for the trunks for the King of England's armour 2 gulden 24 kreutzer. (*Innsbruck, Raubuch, 1514, fol. 10.*)

1514, October 13.—Hans Seusenhofer receives full payment for his journey to England with three suits of armour for the King 40 gulden 52 kreutzer. (*Loc. cit., fol. 101.*)

page 4. The armour was originally plated with silver, then engraved and finally gilded. This process was adopted because gilding is not so brilliant upon steel alone as when it has a silver basis. Much of the silvering remains, especially on the leg armour, and faint traces of gilding appear on parts which have not been over-cleaned. The decoration of the man's armour is engraved with fine, sharp lines. On the breast is St. George on foot fighting the dragon, and on the back is St. Barbara standing near a tower.¹ On the cuisses are two demi-figures of women in early sixteenth century costume issuing from branches of roses and pomegranates. On the breast of the figure engraved on the left cuisse is the word "Gluck." All the armour is covered with elaborate designs of roses and pomegranates, and on the fan-plates of the leg armour are sheaves of arrows, the badge assumed by Ferdinand, the father of Katherine of Aragon after the conquest of Grenada, which was chiefly effected by his archers. The fleur-de-lys is engraved on the jambs.

The armet (Plate XX) consists of six pieces: (1) The skull boldly ridged on the crest with a tapering tail, which follows the conformation of the nape of the neck; (2 and 3) two cheek-plates, hinged to the skull at their upper margins and overlapping in front, the left side over the right; (4) the reinforcing plate, which covers the front of the skull piece, deeply notched in the centre to fit the ridged crest; (5) the visor, which is finely forged with strongly marked concave sweep on the upper side, and circular, vertical, and horizontal perforations on both sides, is pivoted to the skull-piece with pins welded on to the inner side; (6) the beaver, which has a strongly marked medial ridge carrying on the line of the crest and visor, is finished with a bold turnover along the upper edge. It is kept in place by a strap, riveted low down on the right side, which passes round the neck, and fastens in a buckle attached to the left side. From the beaver hang three lames, the lowest being sharply pointed and ridged in the centre. These move easily on rivets, and keep close to the breast as the head is raised or lowered. At the back of the skull-piece is a hole, in which the circular disc, peculiar to armets of this type, was fixed. Another hole is found on the highest part of the crest, with a keyed opening to receive the plume-holder. The cheek-plates are notched to fit this pin. At the back of the right side of the skull-piece is the maker's stamp, the only known example which can be attributed to Conrad Seusenhofer. The weight of the armet is 9lb. 3oz.

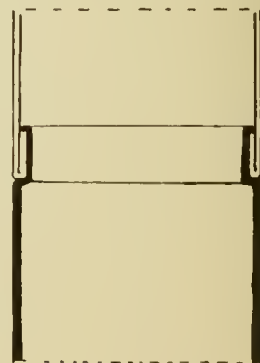


No. 5.

The breast and back are of simple shape, the former being slightly tapul and the latter depressed vertically in the centre. The neck and arm openings are finished with turnovers, but there are no plate gussets. Both pieces are joined by straps and buckles on the shoulders and at the sides.

¹ Both military Saints. Henry VIII and Katherine of Aragon founded a Guild of St. Barbara, the Patroness of Artillery, which was not suppressed with the religious houses at a later date.

From the breast and back, when joined, are hung the jamboys¹ or bases of steel, boldly fluted to imitate the cloth skirts in fashion, especially in Germany, at the period. These bases consist of four pieces, two of which have arched openings cut out to fit over the body of the horse. Splayed lames are riveted to the lower margins of the cuirass, and over these the bases fit loosely. The margins are ornamented with an applied border of latten, originally gilded, in which the letters "H" and "K" joined by true-lovers' knots are repeated. The pauldrons are of six plates each, that on the left having a deep plate covering the arm opening and a high, upstanding neck-guard forged in one piece with the main plate. The right pauldron is hollowed out to take the lance when in rest, but it should be noted that there is no lance rest or rivet holes which would suggest the existence of a rest on this cuirass. This fact goes far to prove that the cuirass at any rate was intended purely for parade and not for war or the joust. The rerebraces are peculiar in the method by which the arm can be turned laterally. In most suits this is effected by bossing out a rim round the upper plate, in which runs a simple turnover on the lower plate. In the present example the surface on the outside is perfectly smooth, and the junction of the plates is made by turnovers on the inside of both pieces, which work one within the other. The right brassard, without the pauldron, weighs 5lb. 5oz., and the left 4lb. 12oz. Here, again, is a point which suggests that this suit was not for any practical use, otherwise the left brassard, which would be most exposed to attack, would be the heavier of the two, and the right, which was on the sword arm, would be lighter. The leg armour does not call for any detailed description beyond a reference to the fine lines of the design and the masterly technique displayed in its execution. The gauntlets belonging to the suit have been missing from the beginning of the last century, when the armour was first critically examined by Meyrick.



Section of Rerebrace.

The horse armour (VI, 1—5) is of rather earlier date, but the engraving which covers it was evidently executed to match that on the man's armour.²

¹ Owing to an error in transcription these have been called Lamboys by Meyrick.

² The engraver and gilder was one Powle, whose name occurs in Royal Bills of Payments for gilding armour and other trappings of State. In the Record Office the following items are recorded under Revels 1519 (Record Office, Exchr. T. R. Misc. Books, 215, Letters and Papers Henry VIII, Vol. 29, fol. 191): "Bardes of Stele: item a stele Barde gilte wt a trayle of Roses and pomegranates wt the story of sainte George and sainte Barbara wt a crynny (crinet) and a Shawfron (chanfron) like gilte of the same worke wroughte by Powle wt a fringe of gold and crymson silke." In the same volume of Royal Expenses is an entry of payments in 1514 of £66 13s. 4d. to Paul van Vreland or Paul Freeland, for a horse bard for the King, and again in 1515 the same craftsman received the same price for "graving harness." As the spelling in these records is frequently very loose it is probable that Paul and Powle are the same individual and that the bard under notice was decorated by him.

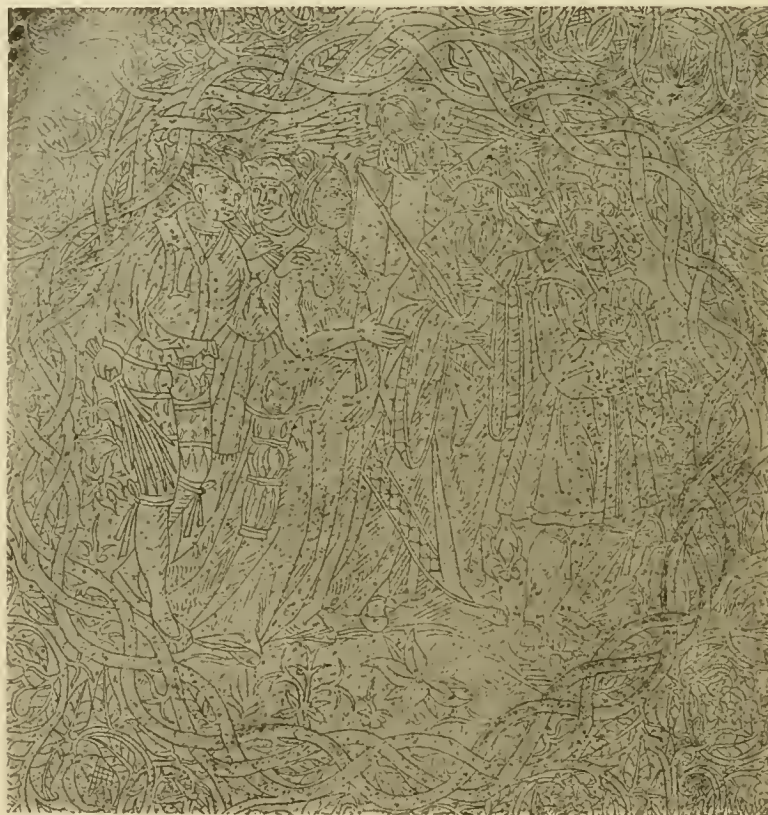
It will be noticed that in the Inventory of 1547, quoted below, the "Engraved Suit" (II, 5) is scheduled with the horse armour known as the "Burgundian Bard" (VI, 6—12). Both these bards are of similar make and design, differing only in the decoration, and both bear the mark which is generally considered to be that used by North Italian or Burgundian armourers at the end of the fifteenth century. It is possible that it was the mark of the Merate brothers, who worked for Maximilian at Arbois. It is probable that Paul van Vreland was responsible for the engraving, and the style is certainly German in feeling. The actual linework of the decoration of the bard is less precise than that of the man's armour, for the line suggests that the burrin was used with a rocking motion, giving a serrated appearance. The principal subjects shown are scenes from the lives of St. George and St. Barbara and St. Agatha, and the whole of the barding is covered with crowns, roses, pomegranates, portcullises, sheaves of arrows, dragons, monsters and amorini (Plate IV). The engraving on the horse armour is illustrated and described by Sir Samuel Meyrick in *Archæologia*, Vol. XXII.



For convenience of reference the horse armour will be considered with the King's armour above scheduled. The bard consists of chanfron (1), crinet (2), peytral (3), crupper (4), and flanchards (5). The chanfron is formed of three large plates, of which the central plate is embossed to simulate vertebræ. There is a hole in the forehead intended to take a spike or a shield of arms. The eye and ear guards are riveted on. The decoration consists of foliage and fantastic monsters. Joined to the chanfron by a hinge between the ear guards is the crinet, which is composed of ten lames, embossed on the upper part to simulate vertebræ, the lower lame being bent out at right angles. The peytral is of five plates, the centre of which (19in. wide) is engraved with a mounted figure of St. George and the Dragon. Hinged to this on both sides are two plates, on which are large bosses,¹ 11in. in diameter. On the near side plate is engraved the Arraignment of St. George before Diocletian. One of the figures in this scene bears the inscription IAMA IR I on his doublet, and the letter A appears on a glaive held by another figure. The off-side plate shows Aphrodisia, the courtesan, superintending the bricking up of St. Agatha in a prison. To the inner margins of the peytral two small triangular pieces are riveted, one on each side. The flanchards are each of one plate, about 28½in. by 18½in., the upper edge being slightly shorter than the lower. They are hung to the saddle with straps and have openings through which the stirrup leathers are passed. The crupper is formed of nine plates, that nearest the saddle being embossed in two slight, lateral ridges. On the near side is depicted St. George on the rack. One of the attendants in this scene bears a glaive, on which is the letter L, and his hat bears the letter M.

¹ Fr. *bossoirs*, Sp. *pezoneras*.

On the same side is a representation of St. George being burnt in a brazen bull, and also the execution of a female saint, possibly St. Barbara. The executioner's sword bears the letter A. On the near side of the crupper is the execution of St. George before Diocletian and his court and the scourging of St. Agatha by Quintianus. In this group is the figure of a piper, whose bagpipes bear a goblet and the letter S. The last scene is St. Agatha being bricked up in prison. The bordering is bordered with the Motto DIEU ET MON DROYT repeated. The tail-guard is in section, a w. and is riveted on to the bard. The peculiarity of this



DETAIL ON THE HORSE ARMOUR OF HENRY VIII (VI. 4).

bard is the narrowness of the chest-plate of the peytral (19in.) and the length of the crupper (42in.).

Weight of the man's armour complete, 64lb. 13oz.; of the bard 69lb. 3oz.

INVENTORIES :

1547. *Item Upon a third Horse a Harnesse given unto the king's Majestie by Themperor Maximilian with a base of stele worke silver and guilte with a border about the same silver and guilte of Goldesmythes*

worke and A barde of Stele with a Burgonion Crosse and the fusye and a Saddell with a crmyrn (crinet) and a shaftron to the same. (See Class VI, 6-12).

1561. *Armoure sent to Kinge Henrie the eight by themperor Maximilian . . . one.*

1611-29. *One feilde Armor of an olde fashion with a base of stele the horses furniture being a barbe Crinitt and a shaffron being all silvered and guilte.*

1676-7. *Masking Armour compleat said to be King Henry ye 7th. one suit.*

1682. *Masqueing Armour compleate said to have been made for King Henry the Seventh - - - - - one suit.*

1688. (Valuation.) *Masquing Armour said to have been King Henry the 7th's - - - - - £100 0 0¹*

6. Armour of King Henry VIII for Foot Combats (Plate V).—From the measurements of this suit it is certain that it must have been made for the King in the early years of his reign, for the external girth of the cuirass is but 34in. and that of the ankle 10½in. As will be seen in the extracts from Inventories given below, there is no definite reference to this armour previous to the year 1660, although "Footman's Armour" is scheduled under the date 1629. There are no armourer's marks on the suit, nor are there any decorations which might assist in the dating of the piece, so we are forced to rely upon the tradition set up at the time of the Restoration, which was probably based upon a previous tradition extending back to the last years of the sixteenth century. For sheer craftsmanship and constructional ingenuity this armour stands out as one of the most notable examples in existence, for it covers the wearer entirely with articulated plates, which, considering their weight, give perfect freedom of movement and absolute immunity from injury. It was used only for fighting at barriers with spear, sword or poleaxe. In the later Inventories it is described as being "Rough from the Hammer," but its condition at the present day does not in any way bear out this description, for although not burnished it is "glazed," and all trace of tool marks has been removed. In 1683 it is described as "black armour," but as none of the guide books of the early eighteenth century refers to its colour it is probable that the paint was taken off at the time when the collection was put in some semblance of order in the reign of William and Mary, and that the hammer marks, if they ever existed, were removed at the same time. It should be remembered when noting the measurements of the several pieces that

¹ Vide also *Archæological Journal* LX, *Jahrbuch des Kunsthists, Samlungen II, The Armourer and his Craft*, etc.

lining and thick underclothing must be taken into consideration, and that therefore the wearer must have been quite a slim, though obviously a strong, man.

The helmet (Plate XX), which weighs 10lb. 4oz., consists of three parts: the skull-piece, the chin-piece and the visor. All these three are pivoted on the visor pins. The skull-piece, which protects the back and top of the head and back of the neck, has a broad ridge at the top, fading away at the back. The chin-piece, protecting the cheeks, chin and throat, has, like the skull-piece, the lining rivets still *in situ*. The skull-piece is closed to the chin-piece (passing inside it) by an eyed pin fixed on a spring attached on each side of the skull-piece. On this spring, beside the eyed pin, and a little behind it, was a stud which passed through a hole in the skull-piece, and when this was pressed it would withdraw the eyed pin from the holes in the two pieces. The eyed pin is linched by a curved hook, pivoting on the chin-piece. The lower edge of the chin-piece of the skull-piece is bent inward so as to fit into a groove in the gorget. The visor, though of one piece of metal, is of two parts. The upper is ridged so as to conform to the skull-piece when the visor is raised. Below this upper part is the ocularium, reaching across the front of the visor. The lower edge of the ocularium projects forward, and on each side of the medial line it is pierced by a series of square air holes. Just above and below the ocularium are two small holes, the reason for which is not apparent. There is no visible arrangement for keeping the visor raised, but on the lower margin on the dexter side are seen three holes, the lower one larger than the other two. Through the larger one would pass the pin for keeping the visor closed. This pin was fixed on the forward end of a spring attached by two rivets to the chin-piece, and would then pass through the chin-piece and the visor, and the two small holes in the latter would be for some arrangement by which the pin could be withdrawn inwards when the visor had to be raised.

The gorget consists of two pieces, front and back, weighing respectively 1lb. 12oz. and 1lb. 8oz. The front is slightly ridged down the centre for about 3in., and the remaining 2in. are rebated so as to lie behind the breastplate, the upper part being flush with the breast. It is bolted to the breast by three screws about $1\frac{1}{2}$ in. below the rebate. The back is bolted to the back plate by a single screw about $2\frac{1}{4}$ in. below the top of the latter. At each side of the back are two eyed pins, the upper ones passing through corresponding holes in the front piece, thus forming a neck opening, of which 13in. is the circular measure of the front and 12in. that of the back. Around this opening is a deep groove, into which fits the inturned lip of the helmet. On the two lower pins hang the pauldrons. The margins of the armholes have stout turn-overs, corresponding to those of the breast and back plates.

The breast, with its articulated lower lame and waist-piece, weighs 7lb., the true breast being $10\frac{3}{4}$ in. high and the lame visible for 1in.

To this lame is articulated the front waist-piece, which is of two planes, the lower one splaying outward. The armholes have stout turn-overs at the margin, and on each side of the breast are two holes through which eyed pins on the back plate pass and can be linched by curved hooks. The back plate, with its lower lame and waist-piece, weighs 5lb. 8oz., and has the stout turn-overs completing, with those of the gorget and breastplate, the margins of the armholes. At the sides are eyed pins for the attachment of the breast, which overlaps the back about three-quarters of an inch. The back waist-piece has on each side of its upper plane eyed pins passing through and attaching the front waist-piece. When the waist-pieces are closed the external girth is 38in.

The pauldrons are a pair, but the left one has the neck-guard, which is wanting on the right, though the holes on the third plate show where it was riveted. The right pauldron weighs 4lb., the left 5lb. 10z. They are slightly ridged, and each consists of five plates, the upper one having near its margin a hole which passes over one of the long pins of the gorget. The lowest lame embraces two-thirds of the brassard, and has a strap and buckle to complete the circle.

The lower part of the body is protected in front by the taces and behind by the hoguine. The taces consist of four lames across the body, the lower one of which is slightly arched in the centre and has an eyed pin for the attachment of the brayette. Those broad lames have on the sinister side half hinges corresponding to half hinges on the sinister sides of the hoguine. The uppermost lame has at its dexter end a hole through which an eyed pin on the upper lame of the hoguine is passed and is linched. From the fourth lame hang over each thigh seven smaller lames, the lowest one being $5\frac{1}{2}$ in. deep, and having hinged to it another piece which, with it, encircles the thigh, and is closed by two eyed pins and curved linch hooks. The outer ends of these lames are connected by sliding rivets working in long slots. The weight of this protection is 10lb. 9oz. On each side the sixth lame from the top is connected with the fifth lame of the hoguine by a strap and buckle. The lower margins of the lowest taces and hinged pieces are bent inwards, forming lips which hold the out-turned upper margins of the tops of the cuisses. Attached by a hasp, which fits over the eyed pin on the fourth lame, is the brayette; this weighs 1lb. 8oz., and has flanges on each side placed behind the small thigh lames, and also a prolongation backward through the fork. These flanges keep the brayette in position, and are pierced for lining rivets, as also is the prolongation. There is a hinged hasp on top of the brayette. This is pierced so as to pass over the eyed pin on the fourth lame of the taces. The tail of the brayette reached nearly to the breech-piece.

The hoguine, which protects the lower back, weighs 4lb. 8oz., and consists of five lames. The upper one is connected by eyed pins and slots with the upper tace. When closed, the circumference being less than that

of the waist-pieces, the taces and hoguine, while allowing play for the body, cannot descend. The arrangement is similar to that of a collapsible drinking cup. The second, third and fourth lames are one deeper than the other, and have half hinges on the sinister side. The lowest lame is



HOGUINE OF HENRY VIII (II, 6).

about 5in. deep, and in the centre curves inward part of the way through the fork. The ends of the five lames are articulated by sliding rivets in vertical slots. In addition to this hoguine, the seat is further protected by a breech-piece, which weighs 7lb. 12oz., and is of peculiar construction, resembling the back of a pair of breeches behind the side seams. It consists of a central piece and eight lames on each side connected by sliding rivets and long slots. The lames bend up so as to come up in the fork. There is no attachment for this breech-piece, but the lower lames pass into the cuisses and so cover the seat.

The brassards may each of them be divided into three parts: the rerebrace, the elbow-cop and the vambrace. But besides these are two important arrangements, one of which is peculiar to this suit. This latter is a series of splints to protect the armpits. There is also a series of arm-bend splints much as seen in other suits. Commencing with the rerebrace, this consists of three plates protecting the back and encircling about two-thirds of the arm; the upper one of these has a semicircular upper margin. Next to these is the true rerebrace, the inner side of which is cut away for the arm-bend splints. The three upper plates are connected with each other by rivets, and the lower lame is connected with the true rerebras by two sliding rivets working in two horizontal slots. These allow of a circular motion of about 3in., which is the length of the slots. Above the elbow-cop, as also below it, is a small lame attached by rivets at each end, the upper lame to the rerebras, the lower one to the vambras. The elbow-cop has a large fluted fan on the outer side of the arm. The external girth of the rerebras is 16½in. The vambrace is of the usual form, but at the distal end are three horizontal slots in which work the rivets of the cuff-piece. The cuff-piece consists of two parts, the larger one having two rivets, with large washers, working in two of these slots, and the smaller piece hinged to the larger, having a stud which works in the third slot, when the cuff-piece is closed by another stud on the small piece springing up into a corresponding hole in the large piece. The lower edges of the two parts of the cuff are turned inward to clip the outward turned edges of the gauntlets. It will be seen that the cuff has a certain circumferential

movement, about 3in. The gauntlets, however, can move throughout the whole circle.

The armpit splints consist of six lames, then a centre lame and then four more. The six larger ones are articulated by sliding rivets on the outer side, and the lowest lame is attached to the true rerebras by a sliding rivet with a large washer working in a horizontal slot, and also by its two ends being held by the sliding rivets attaching the three upper plates to the rerebrace. When the arm hangs by the side of the body, the larger splints lie inside the cuirass close to the body, and when the arm is raised, the splints continue to protect the armpit. There are holes for lining rivets in the margins of the armpit splints. The arm-bend splints consist of seven lames, a centre-piece and seven more lames. Of these the first is attached to the rerebras by a sliding rivet in a vertical slot in the centre. The lowest lame is attached at each end to the vambras. The total weight of each arm defence is 6lb. 10oz.

The leg armour on each limb is similar, the hinges being always on the outside, the eye-pins with curved linch hooks being on the inside. The chief parts are the cuisse, the knee-cop, with its two small lames above, a large fan on the outside, and two small lames below, and the jamb. The cuisse is in two pieces, hinged and closed by eyed pins. The upper margins are turned outward, forming a lip, which is gripped by the lowest lame of the tace on each leg. The two small lames above the knee-cop and the two similar ones below are articulated at the ends. The jamb, also of two hinged pieces, has ridges in front and behind. The lower margins of the front and back are turned outward and gripped by the top of the solleret. The back part of the cuisse is cut away for a series of splints to protect the knee-bend. These splints consist of eight lames above, a centre lame and seven lames below. The uppermost lame is riveted at each end to the cuisse, and the lowest is attached to the back of the jamb by a sliding rivet working in a vertical slot. The total weight of the leg defences is, for the right leg, 7lb. 10oz. and for the left 7lb. 9oz. The maximum external girth of the cuisse is 34in. ; of the calf, 18½in. ; of the ankle, 10¼in. At the top of the cuissard are six holes, now filled up, for lining rivets, four of these outside of the ridge. There are also holes for lining rivets round the lower parts of the jambs.

The gauntlets are a pair, consisting each of twelve pieces and weighing 1lb. 8oz. The upper end is of two pieces hinged and having their upper margins turned over outward so as to be gripped by the cuff-piece of the brassard. There are then nine lames, the fourth of which has an extension for the thumb, and the ninth, with a semicircular end, has in the case of each hand a keyhole orifice, intended to fit over a pin, now missing, in the cuff, or on a piece now wanting, and able to be closed on a weapon by turning the pin. The lames, articulated at their sides, work with great ease. Perhaps another lame for each thumb is wanting.

The sollerets are a pair, consisting of eleven pieces, and each weighs 1lb. 12oz. The heel-piece, 5in. high and 5in. broad, is hinged on the outside to the instep arch and closed by two eyed pins and curved lynch hooks. Next are four arches, then a centre-piece, and then five lower arches, the last of which is articulated to a broad toe-piece, the metal of which is carried under the foot for about 2in. so as to keep the toe down after bending the foot. The toe is about 6in. broad, and the solleret is 12in. long. The heel-piece and first arch are turned over to grip the outward turned lower margin of the jamb.¹

Weight complete 94lb.

INVENTORIES :

1611. *One Footeman's Armour compleate made for King Henry the eight.*
 1660. *Armour of King Henry the 8th cap-a-pe, being rough from the hammer.*
 1676. *Armour Capape rough from ^cy hammer, said to be King Henry ^cy 8th.*
 1683. *Complete black armour rough from the hammer said to have been made for King Henry the Eighth.*
 1688, 1691, 1693. (Valuations.) *Armr. for K.H. 8th, rough from the Hammer* — — — — — — — £40 0 0

7. Portions of a Suit for Foot Combats (Italian Early XVIth Century), probably belonging to King Henry VIII (Plate VI).—The helmet is a fine globose bascinet, bearing the stamp of one of the Missaglia family of a Milan. The visor is in one plate, with a narrow reinforcing plate of engraved metal riveted along the upper edge. The eye-slits in the visor were evidently considered too wide, and therefore dangerous to the wearer. This has been rectified by riveting a plate pierced with smaller holes to the inside. The lower margin of the helmet is engraved with the Collar of the Garter (Plate XX). The breast and back plates are each in one piece, vertically fluted and engraved with crude scrollwork. The pauldrons, of eight lames on the right and seven on the left arm, are hung from pins attached to the cuirass. On the right pauldron is engraved St. George and the Dragon, and on the left the Virgin and Child. The brassards are constructed with narrow, overlapping lames, which completely protect the inside bend of the arm.



No. 7.

The tonlet is composed of two parts, the front and the back, each of nine horizontal lames engraved with foliage and Tudor roses. Each lame is connected to the next by a vertical strap, and the whole tonlet is hung from the cuirass by turning-pins. The gauntlets do not belong to the suit,

¹ Viscount Dillon, *Archæological Journal*, LXIX.



Armour. (late XVIth century.) II.75.

but are of the type which were used in foot combats. There is no leg armour, as jousting on foot was carried on with a barrier between the two combatants, and therefore the tonlet was sufficient protection for the lower limbs. A fleur-de-lys is engraved on the left side of the tonlet which may be an armourer's mark, though these are almost invariably stamped with a punch and not engraved.¹



No. 7.

1547. *Itm one Tunlett pcell guilte w^t a Basenett.*

1611. *One olde fashioned Armor called a Trundlett parcell guilte and graven.*

1629. *Upon another horse one old-fashioned Armor called a Trundlett parcel guilte and graven.*

8. **Armour of King Henry VIII** (Plate VII).—This suit is of the later years of the King's reign. It is decorated with borders of scrollwork engraved and gilt.

The helmet (9½lb.) is of four parts—the skull; the reinforcing-piece over the forehead; the visor (2½lb.), with two horizontal slits for sight and a series of eight rows of short horizontal slits on each side for breathing; and the beaver. The visor fork is wanting (Plate XX).

The gorget, of three lames, is furnished with pins, to which the pauldrons are hung. The breast has a strongly marked tapul, and, besides plate gussets, is articulated at the lower part, to which are attached taces of four lames. From these hang the tassets, also of four lames. The back has a depression down the centre, and articulated to it is a garde-de rein of four lames.

The pauldrons are of five lames each, that on the left shoulder having a high neck-guard.

The brassards are attached to the pauldrons by straps, and the upper arm is capable of a certain amount of lateral movement in a circular horizontal direction by means of rivets set in the lower portion, which work in long slots in the upper part. The inner bend of the arm is protected by narrow, overlapping lames. The canons of the vambrace have a small lame articulated to the lower part of the inside portion. The right hand has a locking gauntlet embossed with simulated fingers, the appearance of the nails being also produced. The left hand has a manifer of the usual type. The cuisses, articulated with the knee-cops, are attached to the jambs by turning-pins. The latter have a small lame added at the upper margin of the back portion, and extend at their lower extremity below the ankle. The foot was originally protected by mail, to which the broad toe-caps were attached.

¹ In May, 1513, Richard Thyrcyll writes to Henry VIII from Antwerp saying that he can find "no harness of the fleur de lys" in any part of Brabant. (*Brit. Mus. Galba*, B. III, 85.)

The horse armour shown with this suit is decorated with the same borders, and will be found under VI, 13—16.

Weight, 81lb. ; girth of cuirass, 54in. ; girth of jamb at ankle, 13½in.

INVENTORIES :

1561. *Armours complete for the Body of Your Mat^e. late father King Henry the Eighth* — — — — — — — — — — IIII

1660, 1676, 1683. *Upon a Horse one Armour cap-a-pe made for King Henry VIII.^h white and guilt, the horse Furniture being one Shaffrone, brest-plate and buttocke.*

1688, 1691, 1693. (Valuation.) *Armour Capape White and gilt made for K. H. VIII ye horse furniture being a Crinett Shaffron gilt brest plate and Buttock Plaine and an old Saddle and Bitt* — — — — — — — — — — £200 0 0



GRANDGUARD OF HENRY VIII (II, 8 B).



PASGUARD OF HENRY VIII
(II, 8 E).

The following form part of the above suit :

8 A. **Grandguard**, with borders engraved and parcel gilt, of designs similar to those on II, 6. On the right side of the upper edge is an oval grated opening for breathing, in front of which the main plate is partially cut out in oblong slots, the metal so cut being turned forwards to form shields to the openings thus made. Weight 12lb. 8oz.

*8 B, C. **Two Grandguards** similar to the above.

*8 D. **Pasguard**, with decorated borders similar to the above. Weight, 5lb. 6oz.

8 E. Pasguard, with borders engraved and parcel gilt of designs similar to the above.

*8 F. Pair of mitten gauntlets, with borders engraved and parcel gilt as above. The hand is of ten lames, and the cuff consists of one plate at the back and three horizontal plates beneath, joined by hinges and linch hooks.



(II, 8 F.)



(II, 8 G.)



(II, 8 G.)



(II, 8 H.)

GAUNTLETS OF HENRY VIII.

*8 G. Locking gauntlet,¹ with borders engraved and parcel gilt as above. The hand is formed of five plates, embossed to simulate the fingers and thumb, the nails being also simulated. The cuff is of two plates joined by hinges and linch hooks.

*8 H. Bridle gauntlet for the left hand, with borders engraved and parcel gilt similar to the above. The border does not run entirely round the cuff, as this would be covered by the lower edge of the pasguard. On the back of the wrist is a large disc decorated with radiating lines of gilt engraving, fixed with a pin.

Weight, 3lb. 2oz.

BRAYETTE OF HENRY VIII
(II, 8 J.)

*8 J. Brayette, russeted and parcel gilt. The main piece has gilt recessed lines placed chevron fashion, and its lower edges are splayed and riveted to two side plates, each side of which has engraved and gilt borders similar to those on II, 6. It preserves its crimson velvet and horsehair lining. This is the only piece of Henry VIII's armour which has escaped the

¹ This type is popularly called the "Forbidden Gauntlet," but the first notice of its prohibition is found in an "Action of Arms" in 1554, in which the regulation occurs: "He that shall have a close gauntlet or anything to fasten his sword to his hand shall have no prize." (Segar, *Honor*, edit. 1602, page 204.)

over-cleaning of past ages, and is in its original condition. It was formerly in the Tower in the XVIIIth Century, and at one time was the cause of certain scandals in the Armouries (see Page 70). There are no records as to when it was taken to Windsor, but the present Keeper of the King's Armoury discovered it in the Round Tower at the end of the last century.

1676-1683. *King Henry y^e 8^{hs} Codpeece parcell Gilt* 1.

1688. (Valuation.) *K : H : 8th Codpce parcell Gilt* 1 at £0 . 0 . 0.

*8 K. **Pair of cuisses**, with borders engraved and parcel gilt as above. Each consists of two plates, the upper edges of which are turned strongly outwards.

8 L. **Pair of taces**. These consist of four lames covering the front of the waist, and five lames on each thigh, one lame being wanting. They are joined together by leathers and sliding rivets. The margins are engraved and gilt with a design similar to the armour II, 8, 9. In the centre is a hole for fixing the brayette.

*8 M. **Culet**, consisting of four lames, with engraved and gilt edges. The design of the ornament is the same as that found on the above.

8 N. **Pair of brassards**, with engraved and parcel gilt margins of a design somewhat similar to that found on II, 8. The lateral movement of the arms is effected by three horizontal slots in the wide centre lame of the rerebrace, in which work rivets fixed to the lowest plate of the pauldron. There is a wide fan-plate, which can be added to the elbow-piece and fixed over a lynched pin on each side. The vambrace is hinged and closed by lynch-hooks. On the upper end of the vambrace is a semi-circular cupped plate to protect the under-side of the elbow.

Weight, 5lb. 4oz. each.

8 P. **Greave, left**, engraved and parcel gilt with bands of decoration similar to that found on Nos. II, 8, 9. The inner part of the greave is cut away for convenience in riding.

8 Q. **Toe-piece**, very broad, with holes for attachment to mail, leather or fabric. It is engraved with a design similar to that found on the saddle-steel of Henry VIII (VI, 19).

Those pieces marked * were removed to Windsor between the years 1686-1690 and were returned to the Tower by Command of His Majesty the King in 1914.



FALLING BEAVER OF KING HENRY VIII
(II, 8 R).

8 R. **Falling Beaver, or Buffe**, consisting of three lames for the face-guard and three neck-lames in front and behind. The falling lames are pierced on the right side with three rows of vertical slits, and a row of small horizontal slits are pierced round the upper margin on both sides. The lames are held in place by spring catches. The decorated borders are similar to those on the helmets of the armours II, 8, 9.

Weight, 2lb. 12oz.

9. **Armour of King Henry VIII (Plate VIII).**—This suit, which closely resembles the preceding armour both in design, decoration and size, was formerly attributed to Charles Brandon, Duke of Suffolk, the King's brother-in-law. The tradition extends back to 1660, and it is quite possible that it had some foundation, as Brandon was of much the same build as the King. The helmet is of the same weight as that on the preceding suit, but it is made up of different pieces, which are decorated with borders of similar type, but not identical with the rest (Plate XX). There does not appear to be any means of keeping the helmet closed. The breast has six holes for attaching a lance-rest and a large staple and linch-pin for attaching the grandguard. The back has a culet of three lames, attached by turning-pins at the sides. The taces are of eight lames each, and reach down the thigh almost to the knee. There is only one neck-guard on the pauldrons, and this is fastened by linched pins to the third lame on the left side. The brassards are in every respect similar to those on the last suit, but there are small additional cup-shaped lames fixed to the lower part of the back of the rerebrace. This is a very unusual detail, and was probably added to protect the elbow from a glancing blow upward. The fan-plate of the left elbow can be removed to fix the pasguard. The gauntlet is attached to the elbow-cop by a linched pin on the latter. The cuisses have each a small lame riveted to the top above the turn-over.¹

Weight, 100lb.; girth of cuirass, 54in.; girth of jamb at calf, 19½in. Transferred to Windsor by command of His Majesty the King, 1914.

INVENTORIES :

1660, 1676. *Upon a horse armour compleate cape-a-pe, white and plaine made for Charles Brandon, duke of Suffolke.*

¹ Portions of this armour were used upon the figure shown as Edward III up to 1825 (*vide* page 25, also Grose, *Military Antiquities*, II, plate 25).

1683, 1691, 1693. (Valuations.) *Armour capape white and plaine wth a mainfaire made for Cha. D. of Suffolk* — — — £158 0 0



PUFFED ARMOUR (II, 10).

10. Portions of a Suit of Puffed and Slashed Armour (German, Early XVIth Century).—The slashings are gilt, and the intervening spaces are engraved with delicate scrollwork. The gorget is of three lames, back and front. The pauldrons and rerebraces are of five lames each, the bracelet elbow-cops are very large and the vambraces are of two parts hinged together. The tassets are of seven lames. The whole has been riveted together at a recent date, and it is impossible to tell how it was originally put together, whether by rivets or by turning-pins. There are three small pieces, with upturned edges, which apparently fitted on to the vambrace to prolong it.

Purchased in 1841.

11. Fluted Armour (German, Early XVIth Century).—

All the surfaces are finely engraved with bands of foliage, arabesques and medallion heads. There is no helmet which can be definitely assigned to this Armour. The gorget is of six plates, with radiating bands of fine engraving. The breast and back are fluted with bold, cabled margins and plate gussets. In the centre of the breast is a shield bearing a demi-lion rampant, with lettering, much worn, which appears to be JOHEIM . . . (?). The pauldrons are of seven lames each, that on the left arm having a neck-guard formed by the turning sharply outwards of one of the lames. The brassards have large elbow-cops and fingered gauntlets with cabled knuckle-ridge. The taces, of three lames, and tassets, of four lames, are fluted with roped edges. The leg armour is wanting.

12. Fluted Armour (German, Early XVIth Century).—This suit is made up of portions of different armours of the same type but varying in the flutings. The armet bears a star stamped six times on the visor. The breast is globose, with radiating flutings and plate gussets. The taces are of four lames and the tassets of five lames, with cabling embossed on the flat of the lowest lame, and not turned over on the edge as is usually the case. The pauldrons, brassards, jambs and sollerets are of the usual type.



No. 12.

13. Fluted Armour (German, Early XVIth Century).—The armet consists of fluted and crested skull, bellows visor, with two small horizontal slits in the upper part, beavor and two neck-lames, back and front. The

visor is closed with a spring bolt. The gorget proper is of four lames, back and front, and has in addition two shoulder-lames on each side, which are held in place by straps passing forward under the lower lame of the gorget, and fastened into the main plate with turning-pins. On the front plate of the gorget are two armourers' marks much worn. The breast is globose, with bold cabled margins and plate gussets. The back has crescent-shaped flutings, and does not belong to the suit. The taces are of eight lames and the garderein of three lames. The pauldrons are of five lames each, that on the left bearing the Nuremberg mark, and the brassards are of the usual type. The fan-plates on the elbow-cops are removable, and the left vambrace has a large, flat-headed pin near the elbow for attaching the pasguard and the bridle gauntlet. The gauntlets, strongly fluted, are of the mitten variety. The leg armour and the broad-toed solerets are restorations.

Gorget.
No. 13.Pauldrons.
No. 13.

GORGET (II, 13).

14. Fluted Armour (German, Early XVIth Century).—The armet consists of the skull, with flutings at the back; bellows visor, with one long vision slit and six smaller openings on each side; and beavor. The visor closes with a spring catch. The gorget is of four lames, back and front; the breast is globose, with plate gussets and strong turn-overs. The taces are of four lames and the tassets of six lames each, the garderein of two lames and the pauldrons of six lames each. The brassards are of the usual type, and the gauntlets are of the mitten variety. The leg armour consists of fluted cuisses and knee-cops with large fan-plates, plain jambs and fluted broad-toed solerets.

15. Splinted Half-armour (German, Middle of XVIth Century.)—All the pieces are decorated with bands of gilt engraving, on which are recessed semicircles interspaced with foliage, a style of ornament very similar to that found on an armour (A. 243) by Wolf of Landshut in the Real Armeria, Madrid. The margins are dentated. The casque is very skilfully



SPLINTED ARMOUR (11, 15).

forged with umbril, comb and neck-guard, all of one piece. The cuirass and gorget are in one, and consist of a series of horizontal "splints," or lames, twelve in front and ten at the back. The back and front are joined by pins and keyed holes at the neck and by straps at the waist. The tassets are of four lames each and the pauldrons of five lames each. On the second plates of each of the latter are holes, possibly for the attachment of neck-guards. The brassards are of the usual type, with half bracelet elbow-cops. The gauntlets are fingered and have wide, bell-mouthed cuffs.

16. Splinted Half-armor (Middle of XVth Century).

—The morion is plain; the cuirass and gorget, in one, consist of ten lames in front and twelve lames at the back, decorated with slight

embossing. The lames are indented and scalloped on the upper margins. The taces and garderein are of two lames each and the tassets of six lames each. The pauldrons are of seven lames, and the brassards have narrow articulated lames on the inner side of the arms. The gauntlets do not belong to the suit.

17. Splinted Half-armor (Middle of XVth Century).—The morion is eight-sided. The cuirass is composed of eleven lames in front and seven at the back, the gorget being included. The taces are of two lames, the tassets of six lames and the garderein of one lame. The pauldrons are of six lames each, embossed with strong volutes, and the brassards have bracelet elbow-cops.

18. Splinted Armour (Middle of XVth Century), consisting of morion, breast and back of twelve articulated lames, each, with slight dentations on the upper margins, the gorget being part of the cuirass; taces of two lames and the tassets of seven lames each; pauldrons of three lames and rerebraces of four lames each. Besides these there are elbow-cops, vambraces and long-cuffed, fingered gauntlets.



Armour of Robert Dudley, Earl of Leicester. II.81.

19. **Splinted Armour (Middle of XVIth Century)**, consisting of morion, breast, back, and gorget in two parts, the former of ten and the latter of eleven articulated lames ; taces of two lames ; garderein of one lame ; tassets of six lames, attached to the taces by pins and keyed slots ; pauldrons of thirteen lames ; brassards hung by pins from holes in the pauldrons ; and gauntlets of the ordinary type. The upper margins of the several lames are dentated.

20. **Splinted Armour (Middle of XVIth Century)**, consisting of morion ; gorget of four lames, back and front, breast and back with strong cabled turn-over at the upper margin, a plate embossed with five simulated lames above and four articulated lames below, their margins richly dentated ; taces of two lames ; tassets of four lames, attached to the taces by straps ; pauldrons of eight lames ; brassards hung by turning-pins to the pauldrons, and fitted with narrow lames dentated at their edges over the inner bend of the arm. The vambraces have vertical flutings on the inner part. The gauntlets are of the ordinary type.

21. **Splinted Armour (Middle of XVIth Century)**, consisting of morion ; gorget of two lames, breast and back, of which the upper parts are embossed to simulate lames decorated with embossed scrollwork and a cross, and three articulated lames at the lower parts ; garderein of one lame ; taces of two lames ; tassets of three lames, hung by turning-pins, their margins embossed to match the cuirass ; pauldrons of seven lames ; brassards and bracelet elbow-cops decorated in similar fashion.

22. **Large Armour (Middle of XVIth Century)**. Plate IX.—This suit is of unusual size, and was attributed to John of Gaunt from the year 1630 to the year 1825. Though it was obviously made for a man of exceptional size, there is no record extant as to its owner. All the margins are ornamented with a border of overlapping discs embossed with roped edges. The burgonet is combed, and has umbril, ear-pieces and beavor, the latter being pierced with cruciform openings. The breast is globose, with plate gussets, and the back bears an engraved monogram, which may be that of the maker, though it does not resemble the usual type of armourer's stamp. The taces are of five lames, and from these hang the tassets of one plate each, embossed with a cross fichy. The brayette is shown in a separate case. The pauldrons are embossed with crosses, the left defence being larger than the right. Both have high neck-guards, which may possibly have been added at a later date. The brassards have large elbow-cops, and the gauntlets are large in the hand and very small in the cuff. The cuisses are of two plates each, and the sollerets are very broad in the toe, following the fashion of the civilian dress of the period. The figure is shown



No. 22.

with a two-hand sword, the only weapon which approximates in any respect to it in size.

Height, when mounted, 6ft. 10½in. ; weight, 66lb.

INVENTORIES :

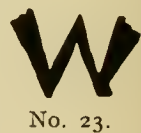
1660, 1676. *Large White Armour cap-a-pe. Said to be John of Gaunts.*

1683. *Large white curazier armour complete, said to have beene John of Gauntes.*

1688, 1691, 1693. (Valuation.) *Arm. Capape wte & Large. Jn. o*
Gaunts - - - - - £25 0 0

22A. **Three portions of brassards (Middle of XVIth Century).—**The borders ornamented with embossed circles overlapping. Part of II, 22.

23. **Armour (Middle of XVIth Century).—**The armet consists of the skull ; double visor, with two horizontal slits in the upper part, a spring door on the right and nine holes on the left side of the lower part ; and beavor. In the centre of the lower visor is a large pin for fixing a reinforcing piece. The gorget is of four lames, back and front. The breast has a sharp tapul, with slight embossing on the upper margin and on the plate gussets, and strong cabled edges. On the left side is stamped a mark, probably that of Wilhelm von Worms. The lance-rest is wanting. The back is embossed with an acanthus leaf border, and has a garderein of one lame. The taces are of three lames and the tassets of four lames each, embossed with similar borders. There are two besagues, or rondels, over the armpits. The pauldrons are of four lames each, and the brassards have elbow-cops of the bracelet type. The leg armour consists of cuisses, knee-cops, jambs and sollerets with no decoration, evidently belonging to another suit.



No. 23.

24. **Armour (Middle of XVIth Century). Plate IX.—**The armet consists of skull ; two-part visor, with horizontal slits in the upper part and openings on both sides of the lower part ; and beaver. The gorget is of four lames, back and front. The breast has a sharp tapul and plate gussets. It is embossed with a large fleur-de-lys in the centre. The back is similarly decorated. The taces are of three lames, and the tassets, of one plate each, embossed with fleurs-de-lys, hang from rings on the taces. The pauldrons are of six lames, and the brassards have bracelet elbow-cops. The gauntlets are fingered and have long cuffs. The leg armour consists of cuisses, knee-cops, jambs and sollerets, the fan-plates and sollerets being embossed to match the cuirass. The circular shield is embossed with fleurs-de-lys in three compartments.

Purchased from D. Colnaghi in 1851.

25. **Half-armour (Middle of XVIth Century).**—The close helmet is decorated with scroll work similar to that found on the body armour. The gorget is engraved with trophies of arms, and the breast and back are engraved with bands of engraving showing mermaids, deer and amorini. The taces are of two lames and the tassets of seven lames each. The pauldrons, of seven pieces, are decorated in a similar fashion to the cuirass. Besides these there are large elbow-cops, vambraces and fingered gauntlets. One of the latter has an engraved border to the cuff.

26. **Figure of an Archer (Middle of XVIth Century),** wearing a jack of plate.

27. **Figure of an Harquebussier (Middle of XVIth Century),** wearing a jack of plate and bandolier with wooden charge-cases and leather bullet-bag.

28. **Half-armour (Middle of XVIth Century).**—The burgonet has a very high comb, small, upturned umbril and cheek-pieces embossed with quatrefoils. The plume pipe is fixed in front of the comb. The gorget, of four lames, is very high in the neck. The pauldrons are of seven lames each, and the hands are protected by long cuffed fingered gauntlets, embossed with crosses on the cuffs. The breast is sharply pointed, and is roughly pounced with hearts and targets. The taces are of two lames and the tassets of five lames.

29. **Black and White Armour (German, Middle of XVIth Century).** Plate X.—The burgonet, which has cheek-pieces, does not belong to the suit. The gorget, of four lames, back and front, has a large keyed slot on the right side, which holds a strap and metal stud from the back lame. It is decorated with vertical bands of engraving showing satyrs and elves, one of whom holds a shield bearing the armourer's mark. The breast is sharply ridged, and has bold cabled margins. Along the top is a band of fine engraving, after the style of Dürer, showing a fountain in the centre, on one side of which is Mercury waking a sleeping soldier and on the other Temperance and other allegorical nude figures. There are also five vertical bands of engraving, two narrow and three broad, the latter showing satyrs, birds and nude figures. On the left breast is engraved a representation of the Crucifixion with a knight in full armour kneeling, and the legend GOT ALLEIN DE IER (To God alone the honour). The plate gussets are engraved, and have roped right-angled margins. The back is bossed out over the shoulder blades, and is joined to the breast by metal straps. There are three vertical bands of engraving showing Diana, satyrs and captives.



The garderein is of one lame. The pauldrons are of seven lames, engraved with bands of foliage. The sleeves are of mail. The gauntlets are fingered, and are engraved with bands of arabesques. The tassets, of ten lames each, reach to the knee; they are decorated with engraved medallion heads, satyrs, etc.

30. **Black and White Half-armour (German, Middle of XVIth Century).**—The burgonet is embossed with two fleurs-de-lys of extravagant form, left bright steel against the black of the rest of the armour. The umbril is movable, and the cheek-pieces are embossed with saltires. The gorget is of three lames. The breast and back are of similar form to No. 29, and are embossed with fleurs-de-lys. The pauldrons are ornamented with embossed foliage, and the brassards are provided with a series of narrow lames to protect the inside of the bend of the arm. The taces are of four lames, the lower of which is splayed out to take a brayette. The tassets are of seven lames, the lowest of each of which is embossed with fleurs-de-lys.

31. **Black and White Three-quarter Armour (German, Middle of XVIth Century).**—The burgonet has a movable umbril and hinged cheek-pieces. The skull is brought to a point, terminating in a knop, after the fashion of Polish headpieces. The gorget is of three lames, with keyed hole similar to that on No. 29, and the breast and back are similar in form to the same example. The pauldrons and rerebraces are together composed of seven overlapping lames, with scalloped lower margins. There are large elbow-cops and vambraces of the ordinary type, and fingered gauntlets. The taces are of three lames, and the tassets of nine lames each, with scalloped upper margins. The knee-cops and the three



GORGET (II, 31).

lower lames of the tassets are removable. The whole suit is ornamented with bands of embossed design on a black ground.

32. **Black and White Half-armour (German, Middle of XVIth Century).** Plate X—This armour is similar to the preceding examples, varying only in that it is bordered with bands of embossed wave pattern. The lower lame of the taces is splayed out to take a brayette.

33. **Black and White Three-quarter Armour (German, Late XVIth Century).**—The close helmet, of cumbrous form, consists of skull; two-part visor, with horizontal ocularium in the upper portion and diagonal breathing holes in the lower portion; and beaver. The lower rim of the

helmet fits over a similar rim on the gorget, which is of three lames, front and back. The breast has a strong tapul, with slight flutings, and bears an indecipherable armourer's mark. The plate gussets and the upper margin of the cuirass are heavily cabled. The back is in three parts, joined vertically. The taces are of three lames and the garderein of one lame. The pauldrons, of five lames each, are hung from the gorget, and from the upper plate of each pauldron is hung a besague, or rondel. The brassards consist of rerebrace, elbow-cop and vambrace of ordinary type. The left gauntlet bears an armourer's mark. The right gauntlet does not belong to the suit. The cuisses are of five lames, the lowest of which, with attached knee-cops, is removable. The brayette is shown in a separate case.



No. 33.

34. Black and White Half-armour (Late XVth Century).—The open burgonet consists of the skull made in two parts, joined along the high crest, the fixed umbril, and hinged check-plates. The gorget is in two parts. The breast and back are of the usual type of this period. The pauldrons and the tassets are of six lames each. All the above pieces are painted black, with vertical stripes left showing bright steel.

35. Black and White Half-armour.—In every respect similar to the above.

36. Half-armour (Late XVth Century), consisting of peaked morion ; breast and back with articulated lower lames ; taces of two lames ; tassets, with scalloped upper edges of six lames each ; pauldrons of seven lames each ; brassards and bracelet elbow-cops.

37. Half-armour (Late XVth Century), consisting of morion ; peascod breast and back, the gorget being in one piece with the cuirass ; tassets of five lames, each with indented margins and engraved borders ; pauldrons ; and brassards with elbow-cops.

38. Half-armour (Late XVth Century), consisting of morion with brass rivets ; breast and back, which bear traces of bands of engraving ; tassets of nine lames each ; pauldrons, embossed coarsely with volutes, and brassards with bracelet elbow-cops.

39. Half-armour (Late XVth Century), consisting of morion ; breast and back, with two articulated lower lames, the breast being engraved with a Maltese cross ; taces of two lames ; tassets of one plate each, embossed to simulate ten separate lames ; pauldrons of seven lames, similarly embossed ; and brassards with bracelet elbow-cops.

40. **Armour (English, Late XVth Century).** Plate XI.—From the year 1753 to the year 1825 this armour was shown as that of William the Conqueror, and from 1825 to 1897 it was attributed to Sir Henry Lee with no authentic justification. The helmet, of the same type as that on the Leicester suit (No. 81), was intended for tilting and not for war. The breast is of the peascod order, with strongly marked tapul and plate gussets. There is no slot for fixing a grandguard, from which it may be surmised that it was only used for the tourney or *mellée* and not for the joust with lances. The taces are of three lames, attached to a lame below the breastplate, and to these the tassets, of three lames also, are hung by turning-pins. The pauldrons are of four narrow lames and one deep plate, each hung from pins on the breastplate, and the brassards are of the usual type in fashion at this period, with detachable inside pieces to the elbow-cops and a pin on the left elbow to take the pasguard. The right-hand locking gauntlet is of the usual type, composed of four parts, and the bridle gauntlet on the left hand is of three pieces, with two lames on the thumb. The cuisses are of eight lames each, attached to the knee-cops, below which are two narrow lames connecting the jambs. These have four lames on the back plates above the heel-plates, and are joined to the sollerets, which have square toes.

INVENTORIES :

1660, 1676, 1683. *Upon a like horse one armour compleat cap-a-pe white and plaine made for William the Conqueror.*

1688–1693. (Valuation.) *Armour cap-a-pe white and plaine w^t a gauntlett and Mainfaire made for Will^m. the Conqueror, the horse furniture being a Chaffron Saddle and Bridle — — — £150 0 0*

41. **Three-quarter Armour (Late XVth Century).**—This armour is made up of the following pieces: Triple combed morion; gorget of two parts; breast, with plate gussets and articulated lower lame; back, strongly indented down the centre; pauldrons of six lames each; taces of two lames; tassets of three lames each; and cuisses, with knee-cops attached.

42. **Half-armour (Late XVth Century),** consisting of peaked morion; cuirass and gorget in one; taces of two lames; tassets of six lames; pauldrons of eight lames; brassards, with bracelet elbow-cops and fingered gauntlets.

43. **Half-armour (Late XVth Century),** consisting of peaked morion; breast and back, with two articulated lames at the lower extremity scalloped on the upper edges; tassets of five lames, with scalloped edges;

pauldrons of seven lames ; and brassards, with bracelet elbow-cops. The breast, pauldrons and tassets have roped edges, and are embossed with spiral volutes.

44. **Armour (North Italian, Late XVIth Century).**—The whole of this half-suit is decorated with engraved trophies, medallion heads and scrollwork, originally gilded. The peaked morion is of the usual type, with vertical bands of engraving. The gorget is plain, and does not belong to the suit. The breast is of the peascod order, with strong tapul. The taces are of two lames, and the tassets, hung from these by turning-pins, are of eleven lames each, decorated with engraved borders and roped edges. The pauldrons are attached to the cuirass by straps and to the brassards by turning-pins. Weight, 35lb. 6oz.

45. **Half-armour.**—Similar to the above. The decoration consists of Medallion Heads and Trophy Work, Engraved and Gilt. The several pieces are : peaked morion, peascod breast and back, pauldrons, brassards and elbow-cops, the latter being engraved with a flowing acanthus design. The taces are of two lames and the tassets of thirteen lames each. The gauntlets do not belong to the suit.

46. **Half-armour.**—Similar to the above but with no engraving.

47. **Half-armour.**—Similar to the above. The several pieces are covered with engraving, formerly gilt, showing trophies of arms, antique heads and arabesques. The suit consists of morion, peascod breast and back, tassets of seven lames and pauldrons of the same number of plates, brassards and bracelet elbow-cops.

48. **Half-armour.**—Similar to the above. The decoration consists of Trophies, Antique Heads and Mounted Warriors. The helmet is a peaked morion, the gorget is of two plates, back and front, and the



breast is of pronounced peascod form. The taces are of two lames, the tassets of eleven lames each and the pauldrons of six lames each. The brassards are of the usual type.

49. **Half-armour**, similar to the above. The decoration is rather more elaborate, and shows a figure of Fortune on the breast, Hercules wrestling with Antæus on the left pauldron and an armed figure on the right. In the centre of the upper part of the breast is a shield of arms.



Arms of the family of Enriquez. No. 49.



CLOSE HELMET OF MALTESE ARMOUR
(11, 50).

50. **Half-armour**, similar to the above, decorated with Engraved Trophies of Arms and Flowing Borders. The close helmet consists of skull; two-part visor, with vision slits in the upper portion and nine holes on the right side of the lower part; beaver; and three neck-lames, back and front. There is a large projecting pin on the right side of the upper visor. The rest of the suit is the same type as the above, except that the elbow-cops are entirely covered with engraved trophies of arms. The tassets are of six lames each, and the gauntlets are engraved to match the rest of the armour.

51. **Half-armour**, similar to the above, but with a morion for helmet.

52. **Half-armour**, similar to the above, consisting of morion, gorget of three lames, peascod breast, plain back, taces of two lames, tassets of eleven lames, pauldrons of seven lames, brassards hung by turning-pins from the pauldrons, bracelet elbow-cops and plain gauntlets. All the armour, except the gauntlets, is decorated with engraved bands of trophies and volutes ending in medallion heads.

53—65. **Thirteen Half-armours**, similar to the above, consisting of morion, breast, back, pauldrons and brassards.

On loan to Dover Castle.

66. **Half-armour**, similar to the above, consisting of long-breasted cuirass, brassards, pauldrons, etc.

On loan to Dover Castle.



Armour of William Somerset, Earl of Worcester. II.83.

67—72. **Six Half-armours**, similar to the above, consisting of morion, breast, back, pauldrons, brassards and tassets.

On loan to the Maison Dieu, Dover.

Nos. 44 to 72 inclusive were brought from Malta in 1826.

73. **Half-armour (Late XVth Century)**, consisting of close-helmet, high gorget, breast with tapul, back, taces splayed boldly outwards to take the bombasted trunks of the period, fingered gauntlet on the right hand and manifer on the left hand. Weight, 42lb.

74. **Armour for the Joust (Late XVth Century)**.—The close helmet is reinforced with a mentonnière. The tapul breast has a shoulder shield or *manteau d'armes* attached to it by a bolt. The brassards are of the usual type, with a pasguard fastened by a pin on the elbow. The taces are of two lames, with roped half-turnovers at each extremity, which seem to have been intended to join a garderein. The tassets are in two parts, the upper, of two wide plates, being attached to the lower by keyed slots and pins. Total weight, 70lb. 4oz.

75. **Armour for the Joust (Late XVth Century)**. Plate XII.—This suit consists of close helmet, breast and back, taces of six lames, pauldrons, grandguard, pasguard, manifer, cuisses of two plates each, jambs and sollerets. The jambs are embossed out over the ankles to allow a closer fit to the leg. This figure is shown with the horse armour VI, 26, 73, 82, 89. Total weight of man's armour, 59lb.

76, 77. **Armours (Late XVth Century)**, consisting of open helmet, breast, back, long tassets, brassards, and knee-cops.

On loan to the Royal Naval Officers' Mess, Portsmouth.

78. **Three-quarter Armour (Late XVth Century)**.—The close helmet consists of the skull; two-part visor, with horizontal slits in the upper and a series of large holes on the lower part. The visor is closed by an F-shaped hook, and there is a large pin in the centre for attaching a grandguard. The gorget is of four lames, back and front, and is unusually high. The breast is straight-fronted, with holes for attaching a lance-rest and two square holes in the lower part for bolting on the placket. The taces are of one lame, and the tassets, or laminated cuisses, are of fourteen lames each with knee-cops attached. The pauldrons are of six lames each, and the brassards, elbow-cops and gauntlets are of the ordinary type. All the rivets used in this suit are brass.

79. **Half-armour (English, Late XVth Century)**.—The close helmet has a combed skull, a two-part visor forming a wide reinforcing piece

on the brow. The lower part is pierced with twelve vertical slits on each side. The beavor is closed by a hook in front, and is embossed at its lower edge to fit over a corresponding rim on the gorget. The gorget is of four lames, back and front, and is remarkable for the exceptional height of the neck. The breast is of the peascod type, with strongly marked tapul. It has a square slot in the centre for attaching the grandguard, and is furnished with a lance-rest of four teeth. The back is joined to the breast by metal straps on the shoulders and at the waist. The taces are of four lames each with scalloped margins. The pauldrons are of six lames each, and the brassards are provided with a series of splints on the inside of the arm. The right-hand gauntlet is fingered, and that on the left hand is of the mitten variety.



ARMOUR FOR THE
JOUST (II, 80).

80. Half-armor (English, Late XVth Century).

—Very similar to the above. The close helmet consists of two-part visor, with horizontal slits in the upper and a number of large holes in the lower part; and beaver, opening in the centre and closed by a hook and staple. The gorget is of four lames, back and front, and is remarkable for its height. The breast is of the peascod order, with strong tapul. The taces are of one lame, and tassets of five lames each, splayed outwards to cover the bombasted breeches in vogue. The breast has a four-toothed rack for the lance-rest. The back is sharply turned outwards at its lower extremity. The

pauldrons are of six lames each, the upper plates being embossed with oval excrescences to fit over the steel straps which join the breast and back. The brassards are of the usual type, the inner parts of the elbow-cops being removable. The right-hand gauntlet is fingered and that on the left hand is a mitten manifer.

81. **Armour of Robert Dudley, Earl of Leicester**¹ (1532—1588), made by **Jacobe**² (Plate XIII).—Although the actual decoration of this suit is not shown in the *Armourers' Album* (referred to on page 3) in the Victoria and Albert Museum, the treatment of the several *motifs* is so similar that there can be no doubt but that the maker was Jacobe, and that for some reason or other the design in the *Album* was altered in the making and decorating of the armour. Like all the armour made by this master, the ornament consists of designs recessed and elaborately engraved. The suit has been over-cleaned in past times, and is now "white," or bright steel colour, but it was probably russeted and gilt, like the Hatton suit at Windsor, the Smythe, and the Worcester suits in the present Collection. The surfaces are ornamented with the Ragged Staff of the Beauchamps placed saltire-fashion, and charged with the crescent of cadency. The breast and back have vertical bands of decoration, in which are seen the Muzzled Bear and collars of the Orders of the Garter and St. Michael. Leicester received the Garter in 1559, and the Order of St. Michael was given him by Charles IX in 1566, an unusual honour, which was seldom bestowed on foreigners at this period. The initials "R. D." occur on the breast, back, and cuisses. It is a curious fact, and an example of the carelessness and ignorance with which this national Collection was treated in the eighteenth and early nineteenth centuries, that this suit, with all these very definite proofs as to its ownership, was described for many years as the armour of James I. A portrait of Leicester, reproduced on Page 5, for many years attributed to Zuccherò with no authentic foundation, shows parts of this armour. The close helmet (Plate XXI), is of the usual Elizabethan type. The skull is forged in one piece, with high comb and plume-pipe. Hinged to the skull are two cheek-plates. The two-part visor sweeps sharply outwards at the lower edge of the vision slit. There are no openings on the left side, but the right side is pierced with thirty holes. The visor is kept closed by an "F" hook, a noticeable feature in all the close helmets attributed to Jacobe. The gorget is in two parts of four lames each. The upper edge is bossed out in a bold rim to fit the corresponding rim on the lower edge of the helmet. The breast of peascod form, with sharp tapul, the upper edge being sharply turned outwards, with an articulated lame at the waist. The

¹ Robert Dudley was the head of his own family, but used the crescent as the second surviving son of his father, John Dudley, Duke of Northumberland, Master of the Armouries, *q.v.*

² See Index of Armourers.

back has a similar lame and a splayed-out garderein with scalloped edge. The tassets are of nine lames detachable at the fourth lame. The pauldrons are of five lames each, that on the left being the larger. The brassards are of the usual type, the left elbow-cop having a pin for attaching the pasguard. The left vambrace alone shows traces of the original gilding. The right-hand gauntlet is fingered, with scalloped cuff, and the left hand is protected by a mitten gauntlet. The short cuisses, jambs and sollerets are of the usual type, the latter being slightly pointed. It is noteworthy that the extreme length of the solleret is only 11 in., which, allowing for the leather "arming shoe," would give the length of Leicester's foot as about 9 in.¹ Weight, 79lb. 8oz.

81 A, B. **Grandguard**² and **Pasguard** decorated like the above, the Grandguard has one articulated lame. The chamfron will be found under VI 49.

1611, 1629, 1660. *One Tylte Armr. compleate graven wth the ragged staffe made for the Earle of Leicester the horse having a steele sadle and a fore part of barbe plaine a Crinet and shaffron pcell guilte and graven wth a hinder part for a horse made of plates of steele and a bridle.*

1676. *On a like horse Compleat Armour Cappape wth^e Ragged Staff wth a maine Guard & Pasguard made for^e Earle of Leicester, ^e Horse furniture being a Shaffron Crinett and Brestplate of^e same, sadle & Raynes.*

1688. (Valuation.) *Armour Capape engraven wth a Ragged Staff, Mainfaire and Gauntlet made for^e Earle of Leist^r. - - £208 0 0*

82. **Armour of Lord North**³ (1530—1600), made by **Jacobe**, late **XVIth Century**.—The decoration consists of broad recessed bands gilded. The close helmet is of four parts—the skull with high comb and four neck lames; the two-part visor, of which the upper part is combined with a reinforcing plate and is pierced with two horizontal vision-slits on each side, the lower portion being pierced with nineteen breathing holes on each

¹ Nichols, *Progresses of Queen Elizabeth*, Vol. I, sub ann. page 21, gives the following description of the Christmas Revels at the Temple in 1562, taken from Dugdale's *Origines Judiciales*: "After the first course served in the Constable Marshal (Robert Dudley) cometh into the Hall arrayed in fair rich and complete harneys white and bright and gilt with a nest of fethers of all colours upon his crest or helm and a gilt poleaxe in his hand; to whome is associate the Lieutenant of the Tower (Mr. Parker) armed in fair white armour . . . and with them attendeth four men in white harneys from the middle upwards and halberds in their hands bearing on their shoulders the Tower." Meyrick (*Antient Armour*, Vol. III) states that Dudley's armour in the Tower was brought out and exhibited in the Tiltyard, Westminster, on November 17, the Queen's birthday, every year, but he gives no authority for the statement.

² Figured in colour in Starkie Gardner's *Armour in England*, 1897.

³ Roger, second Baron North, Ambassador to Vienna, 1568, served with Leicester in the Low Countries and created Knight Banneret, 1590, Privy Councillor.



HELMET OF LORD NORTH (II, 82).

are of five lames each and are hung from the gorget by lynched pins. The brassards are attached to the pauldrons by turning-pins. The cuisses are very short, the upper part of the leg being protected by the long tassets. The jambs are attached to the knee-caps by turning-pins. The feet are covered by mail with toe-caps of plate.

Though varying in certain details the drawing in the *Armourer's Album* (Vict. and Alb. Mus.), No. XI, is evidently intended to be a design for this suit. Weight, 49lb.

83. Armour of the Earl of Worcester¹ (1526—1589) made by Jacobe (Plate XIV).—This suit is decorated with plain gilt borders and gilt crescent-shaped indentations on the surfaces of each piece. A portrait of Worcester wearing the armour is shown on page 5. The two helmets belonging to the suit are a burgonet with buffe and a close helmet. The burgonet (7lb. 20z.) has a high crest and an umbril, two cheek-pieces and a



ARMOUR OF THE EARL OF WORCESTER (II, 83).

From the *Armourer's Album*, Vict. and Alb. Mus.

¹ William Somerset, third Earl of Worcester, an expert at the joust, assisted at the Coronations of Edward VI, Mary, and Elizabeth, raised a land force at the time of the Armada.

lame at the back of the neck. The cheek-pieces have two small triangular plates which can be brought under the chin. The buffe is attached to the headpiece by small hinged plates which pass over lynched pins. At the top of each cheek-piece is a kind of fold of metal which clips on to the umbril. There are also two stops on the burgonet which keep the lower part of the buffe in position. The buffe (3lb. 4oz.) is of four lames fitted with spring pins so that it can be kept raised or lowered at will. The lowest lame is splayed out to protect the throat. The two upper lames are pierced with holes for breathing. The close helmet (11lb.) opens in front at the chin. At the back of the skull is a pin over which the top lame of the gorget is lynched, thus keeping the head perfectly rigid. In most cases the helmet closes over the upper edge of the gorget, but in the present example the gorget closes outside the lower rim of the helmet, proving that the helmet was put on first, before gorget and cuirass, instead of last, as was almost invariably the order of arming. The visor, of two parts, is pierced on the upper part with two long horizontal and four vertical slits on each side; on the right side of the lower, which is also pierced with slits, is a pin for attaching the grandguard (Plate XXI). The gorget is of three lames, the upper of which is embossed to fit a similar rim in the helmet. The breast, with a well-marked tapul, has plate gussets and a lower lame with scalloped edge riveted on. The back is nearly flat and, like the breast, has a lower scalloped lame. The taces are of three lames hinged to the breast. They are prolonged by lower taces or tassets of four lames fastened with turning-pins.

The pauldrons are of five lames each. On the left pauldron is a high neck-guard fastened by lynched pins. The brassards are of the usual type, with a rim and collar arrangement on the rerebrace to allow of lateral movement. The fan-plates on the elbows can be detached for adding reinforcing pieces. The gauntlets are fingered. The cuisses have cabled upper edges and the jambs reach to the ankles. The feet are covered with mail, to which are attached toe-caps of plate. It is a remarkable fact that the wearer of this heavy armour measured only 10in. round the ankle and 15½in. round the calf.

A drawing of this suit is included in the *Armourer's Album* quoted above.

The chanfron of this suit will be found under VI, 50.

Weight, 106lb. without the close helmet.

83 A. Armour made by Jacobe for William Somerset, Earl of Worcester.—The engraving and gilding are similar to that on the preceding armour. The burgonet has a fixed umbril and hinged ear-pieces, the lower part of the left piece being wanting. The falling buffe is of five lames, the two upper lames being pivoted and held in place by spring pins. The uppermost lame is cut out at its upper edge to form a vision-slit with the umbril, but there are no openings at all in the face-plates of the buffe. Weight, 19lb. 12oz. The gorget is of four lames back and front. The breast and back are similar to those of the preceding armour, but are lighter

in weight. The placket which fits over the breastplate has a heavy adjustable lance-rest. The tassets are of seven lames each, of which the four lower lames are removable. From the last years of the XVIIIth Century this Armour was shown at Windsor as having belonged to the Black Prince. Weight complete, 80lb. 4oz.

Removed to Windsor in 1686.

Returned to the Tower by command of His Majesty the King, 1914.

84. **Armour of Sir John Smythe¹ (1534—1607), made by Jacobe** (Plate XV).—Between the years 1827 and 1899 this suit was shown as the armour of the Earl of Essex, presumably because it much resembles the suit shown on a portrait of that nobleman at Middleton Park. Hewitt, in his Catalogue of 1845, states that this armour was worn at the Coronation of George II, but he gives no authority for this statement, which will be found discussed under No. 89 of this Class. Although elaborately decorated, this may be considered to be a “hosting” or war suit, though it might have been used for the joust with additional pieces.

The decoration consists of bands of engraving, sanguine and gilt, showing strapwork designs, figures of Minerva, Fortitude and Mars, and the motto FVTVRA PRAETERITIS. Although the design for this armour or for No. 85 A is shown in the *Armourer's Album* above referred to, the style of decoration is rather different to that found on the majority of pieces attributed to Jacobe.

The helmet is of five parts—the skull, with high roped crest engraved and gilt; the beavor, of two parts joined with a hook at the chin; and the two-part visor, of which the upper part is pierced with two sets of horizontal vision-slits and the lower portion has twelve vertical slits on each side arranged in two rows (Plate XXI). The front of the visor curves forward in the manner peculiar to English helmets of this period. The lower edge of the helmet is embossed in a rim to fit over a rim of a similar kind on the gorget, which is of four lames back and front. The breast and back are decorated with broad bands of engraving, sanguine and gilt. They are joined by gilt metal straps on the shoulders and at the waist. The tassets are of seven lames, and the garderein is wanting. The pauldrons, of five lames each, that on the left being the larger of the two, are decorated with vertical and horizontal bands of gilt engraving. The brassards are of the usual type, with detachable fan-plates at the elbows. The gauntlets are fingered and have elaborate engraving, sanguine and gilt, on the cuffs. The cuisses, of eight lames each, are attached to the tassets by pins and keyed slots. The knee-cops have fan-plates decorated like the other parts of the suit. The greaves can be detached from the knee-cops by means of turning-pins, and have three

¹ First cousin of Edward VI through his mother. Knighted 1576, reported to Elizabeth for treason and imprisoned in the Tower, 1596–8. Author of *Discourses on Diverse Sorts of Weapons*, 1590, *Instructions, Observations and Orders Militarie*, 1597. In the former work he strongly advocates the use of the bow.

articulated lames at their lower extremities. The sollerets have square toes with slight swellings at each side. Weight, 69lb. 5oz.



ARMOUR OF SIR JOHN SMYTHIE (II, 84).
From the *Armourer's Album*, Vict. and Alb. Mus.

84 B. **Cabasset-Morion.**—Part of the above suit, finely forged in one piece with engraved figures of Justice and Fortitude on each side and two demy figures of Fame on the brim.

84 c. **Pair of Short Cuisses.**—Part of the above suit, of ten lames each, with knee-cops, and two small lames beneath.

For horse armour of this suit see VI, 51, 115, 116.

Nos. 84 A-C removed to Windsor between 1686–1690.

Returned to the Tower by command of His Majesty the King, 1914.

84 A. **Armour made by Jacobe for Sir John Smythe as a Present to King James I.**—This is of precisely the same decorative design as the preceding armour, the principal features being the medallion head of Janus surrounded by the motto FVTVRA PRAETERITIS, Minerva, Fortitude, Mars and Justice. The burgonet has a fixed umbril and hinged cheek-pieces, and the falling buffe is of four lames, the two upper plates being pivoted and locked by spring pins (Plate XXI). The top lame has a series of slits cut in an embossed rim at the extreme edge and the next lame is pierced with eight vertical slits. The buffe is kept in position by a strap round the burgonet. The gorget is of five lames back and front. The breast and back are similar to those of the preceding suit, the breast showing the same cross fleury supported by angels.¹ The cuisses are of fifteen lames each, with knee-cops, and two small lames beneath.



MORION OF SIR JOHN SMYTHIE (II, 84 B).

¹ Figured in colour in Starkie Gardner's *Armour in England* 1897.

INVENTORIES :

1611. *One Armour compleate given by Sir John Smith to the Kinge's Majesty, viz backe, brest Almaine Collar, Burgonett murryon sleeves of maile steele for a sadle shaffron a guilte Targett one pre of long cushes one pre of shorte cushes a belte of Crymison velvett one pre of guilte stirropes and twoe case of pistoles.*
1629. (*A similar entry, but scheduled as "in a Truncke."*)
1676. *Armour richly guilte and graven consisting of a back, brest, cushes, a pair of Knee Copps, Gorgett & a pair of short Taces, a Burgonett, wth a Buffe, Murrion, a Gauntlet, a Shaffron, wth a pair of Guilt Steeles for a Sadle.*
- 1688, 1691. (Valuation.) *Curazier Armour Sanguined & parcell'd gilt, consisting of Back Breast & Taces, Pack' Gorg' Headpeece Chin peece for $\frac{5}{8}$ Mouth & Sleeves of Maile* — — — £100 0 0

85. Portions of an Armour of George Clifford, Earl of Cumberland¹ (1558–1605).—The ground of the armour is hatched all over and



ARMOUR OF THE EARL OF CUMBERLAND (II, 85).

blued, with borders of scroll-work engraved and gilt. At regular intervals there are diagonal bands of gilt engraving, diapered with embossed and eight-pointed stars of bright steel with gilt rays. The peculiar design of this decoration is found on the armour shown in the portraits of the Earl of Cumberland in the possession of Lord Hothfield and the Duke of Buccleuch. One complete arm-defence, consisting of pauldron of five lames, tubular rerebrace and vambrace, and small bracelet elbow-cop. One cuff of a gauntlet; the other part wanting. One pair of cuissards, consisting of short cuisse, knee-cop with fan-plate, and jamb, the hinged back plates of which do not completely encircle the leg for convenience in riding. The chanfron to match the above will be found under VI, 52.

¹ At the Jousts held at Westminster, November 17, 1590, Sir Henry Lee resigned his office of Queen's Champion in favour of George Clifford. (Nichols, *Progresses of Queen Elizabeth*, Vol. III, sub ann., page 60.) The portraits above mentioned show Clifford wearing the Queen's glove in his hat.

86. **Armour (XVIth–XVIIth Century).**—The close helmet has breathing openings on the right side and is closed by a large F hook on the visor. The lower rim is embossed to fit the gorget. The breast is straight-fronted with a marked tapul, and shows clearly the lack of elegance which is such a marked feature of the later style of armour as compared with that of the earlier years of the XVIth Century. The taces are of three lames, hinged to the breast. The pauldrons are of the usual type, but are peculiar in that they have small raised bosses to allow for the lynched pins which fasten the cuirass on the shoulders. The cuisses are of seven lames articulated, and the greaves terminate in sollerets of the graceless form in vogue at this period.

87. **Armour for a Boy (XVIth–XVIIth Century),** decorated with Bands of Etched Floral Designs and Medallions, originally gilded.—The burgonet has a fixed umbril and hinged cheek-pieces. The gorget is of three lames, back and front. The breast has plate gussets and a hinged lance-rest. The back has a garderein of one lame. The pauldrons, of six lames each, are attached to the gorget by pins and keyed slots. The tassets are of nine lames each, and the gauntlets are of the usual type.

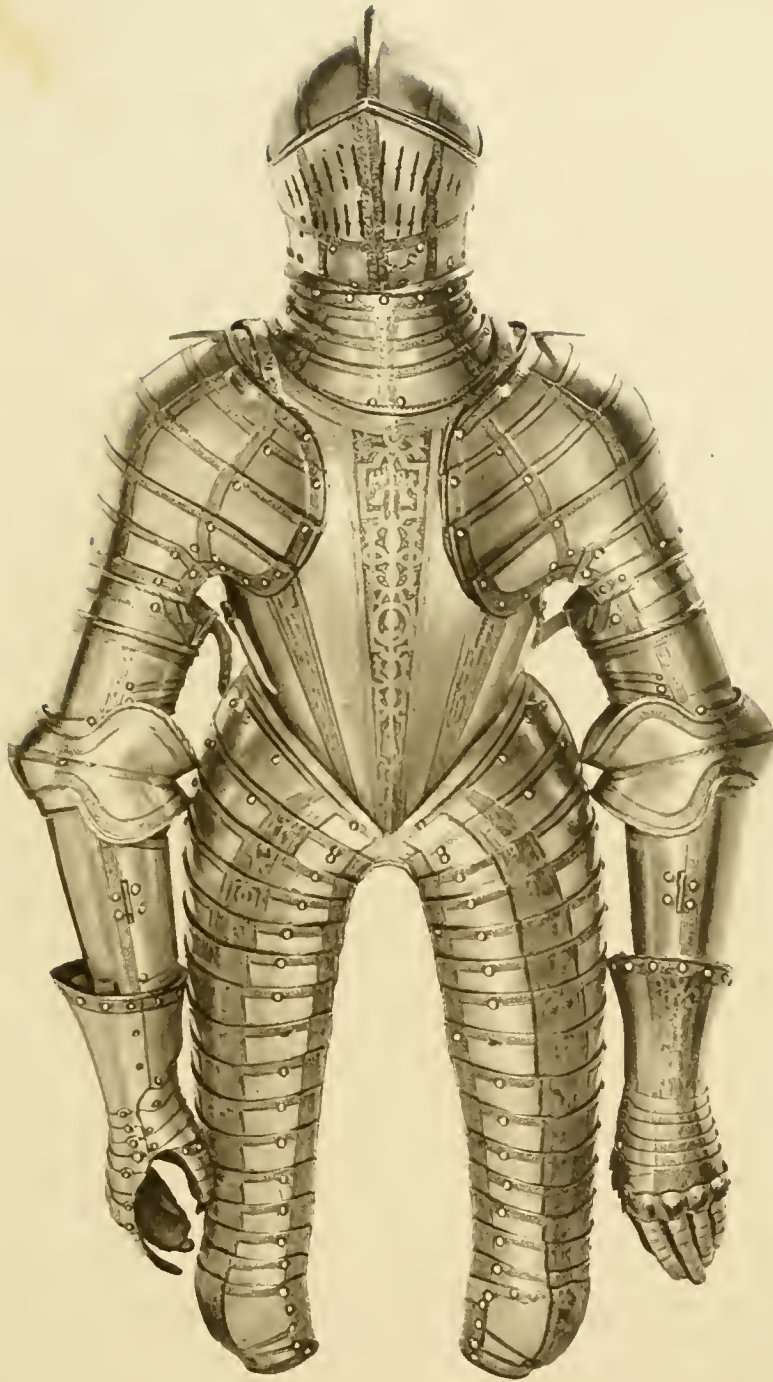
88. **Armour of Henry Prince of Wales (1594–1612),** sent as a Present from the Prince de Joinville¹ (Plate XVII).—As an instance of the confusions which have arisen in cataloguing the Collection it may be cited that this armour is scheduled in the Inventory of 1629 as “a present from Prince John Voile.” It is decorated with bands of gilt engraving, roped edges being simulated with gilding. The



GORGET OF HENRY PRINCE OF WALES (II, 88).

outer borders show trophies of arms, and within these are oval medallions portraying classical subjects which appear to represent the victories of Hannibal and subjects from the *Iliad* and *Odyssey*. The close helmet consists of the skull with roped crest; the two-part visor, with vision-slits and pin in the upper part, and nine holes arranged in a circle on each side of the lower part, the beaver fastening at the sides with hooks; two neck lames front and back; and a pierced plume-pipe. The gorget is of two parts. The breast is straight-fronted, and the back has a garderein of three lames. The pauldrons are of nine lames each and the rerebraces turn in V-shaped rims. The elbow-cops, hinged vambraces and

¹ Charles de Loraine, brother of the Duc de Guise, came to England 8th May, 1607. On his departure he presented Armour to Prince Henry, which was acknowledged by the Prince in a letter dated 11th February, 1607–8:—“I perceive, my cousin, that during your stay in England you discovered my humour, since you have sent me a present of two things which I most delight in, arms and horses.” (Birch, *Life of Prince Henry*, p. 100.)



Armour of Sir John Smythe. II.84.

fingered gauntlets are of the usual type. The tassets are of eight lames each and are attached to the cuirass by hinges and straps. The cuisses, knee-cops and greaves are of the usual type, but the sollerets show clearly the decadence of the constructional side of the armourer's craft, for the lames all overlap downwards and there is no central tread, making free movement difficult in the extreme. A shield, decorated with subjects of a similar type, but treated more skilfully, is exhibited in the Wallace Collection (No. 673) signed "Hieronymus Spacinus, Milan, made at Bologna." Weight, 42lb. 13oz.

1629. *One small feild Armo' guilte graven and enamelled given by Prince John Voile to Prince Henry.*

89. **Armour of Charles I when Prince (Milanese, Early XVIIth Century).** Plate XVI.—This is purely a parade armour, possibly used also for the joust, which in the late XVIth century was a very harmless pastime. As an example of the craft of the metal-worker it is undoubtedly the finest specimen in the Collection, and will bear comparison with the most notable armours in Europe. The ground work is russeted with bands of minute damasceneing of arabesque designs. The helmet, pauldrons, breast, back, elbow-cops, gauntlets, knee-cops and toe-pieces are all finely embossed to simulate lions' masks. It is extraordinary that such notable features are not mentioned in any of the Inventories of the Royal armour and that there are no traditions attached to it beyond the absurd legend, current at the beginning of the XIXth century, that it belonged to the Black Prince. Meyrick, writing in 1824, states that this armour was shown as belonging to Charles II, and this is the only definite statement we have respecting it in all the descriptions of the Armouries. The Guide Books from 1770 onwards state that this armour was used by the King's Champion at the Coronations of George I and George II, but none of the engravings of these ceremonies bear out this tradition, though at the same time it should be remembered that these illustrations were produced some time after the event, and historical accuracy was not studied so carefully by artists as it is at the present day. From a letter from Giovanni Biondi to Dudley Carleton,¹ dated July 1, 1613, we

¹ Sir Dudley Carleton, Ambassador to Venice, 1610-1615; Biondi, a Venetian, was Secretary of Legation in Paris and also negotiated for the Duke of Savoy. The armour was intended for Prince Henry, who died in the previous year. The Court of Savoy had been for some time endeavouring to arrange a marriage between the Prince of Piedmont, eldest son of the Duke of Savoy, and the Princess Elizabeth of England, this to be conditional on an engagement between Prince Henry and the Prince of Piedmont's eldest sister. The extract which refers to the above gift runs as follows: ". . . Presento il Marchese la Regina di una cassetta di cristalli di Rocca, legati in argento artifiziosamente lavorato, e dorato con otto Leoni d'argento massaccio pur dorati che servone di Base a detta cassetta; la quale va' riempita di quattro Vesci ricchissime conteste d'oro, e con riciami non venute mache aspettano quanto prima si come anco un' Armature per il Prencipe, fatta fabricase a Milano per quanto dicono dal Prencipe di Piemonte con aggiunta alla vaghezza e ricchezza di quella che gia furone fatto per Carlo V e per Franc° Re di Francia de i modelli di quali egli s'e servito, al Re ha donato un Tigra, una Leonessa un Gatto seluaggio, ed un lupo cerviero morto per strada &c. &c." (S. P. Dom. Jac I, LXXIV, 22.)

learn that the Ambassador Extraordinary of Savoy (Marquis de Villa) had presented to the Queen of England a casket of crystal supported on eight silver lions, to the King a lynx, a lioness and a tiger ; and to the Prince a suit of Milanese armour made after the model of those of Francis I of France and Charles V. Now, there is strong evidence that this is the suit referred to, for it should be noted that all the other presents refer to lions or kindred beasts, the lion being the Royal heraldic bearing of Scotland and of England. The two armours mentioned are probably the famous armour in Madrid by Bartolomeo Campi, in which the shoulder-pieces are finely formed lions' masks, and the equally celebrated Armure aux Lions in Paris which some authorities at the present day ascribe to Francis I, although no definite record of this exists. Francis I was certainly painted in armour decorated with lions' masks in a portrait by Clouet, in the Uffizi Gallery ; and his successor, Henri II, is represented in medals and statues with the same form of decorated armour. In the Royal Collection at Turin is preserved a pauldron (c. 146) bearing a lion's mask which is attributed by Angellucci to Antonio Martinengo III of Brescia, or to one of the Dukes of Saxony. The workmanship on the Tower Armour resembles that of Lucio Piccinino, circa 1570, and is evidently by a follower of this master if not from his own hand. To bear out the later traditions of this armour we may turn to the bust of Charles I in the Royal United Services Museum, and the statue of George I formerly in Grosvenor Square, which both show pauldrons formed of lions' masks. The latter monarch was probably thus accoutred, because the armour was used at his Coronation. The tradition which ascribed it to Charles II is doubtless due to the fact that it resembled the atrocious " palimpsest " statue made originally for John Sobieski, King of Poland, and set up by Lord Mayor Vyner in honour of Charles II near the Royal Exchange.



GORGET OF PRINCE CHARLES (II, 89).

The close helmet consists of the skull embossed to simulate the mane and head of a lion, the hairs on the upper jaw being damascened with gold ; the double visor, with two horizontal slits in the upper part and a circle of sixteen holes on the right side of the lower part ; and the beaver. The helmet is closed by a hook and staple, and the pin on the upper visor is wanting. There are two neck lames in front and two at the back. The gorget is in two parts, richly damascened, the front plate showing an eagle, one of the badges of Savoy.¹

The breast has plate gussets and one articulated lower lame. From the lines of the decoration it is probable that there was a second lame originally.

¹ Figured in colour in Starkie Gardner's *Foreign Armour in England*, 1898.

The back has two articulated lower lames and a garderein of one lame. The upper part of breast and back is embossed with lions' masks, griffons and vines. The tassets are of eight lames each, and here again, from the lines of the decoration, it is evident that a lame on each side is wanting. For this reason it is difficult to set up the armour on a figure as the loss of these parts brings the breast and cuisses out of true proportion. The lance-rest is wanting. The placket is attached to the breast by hooks which engage staples on the latter, and by a turning-pin in the centre. There is a square opening on the right side of the placket to fit over the lance-rest. The pauldrons are of six lames each, that on the left being deeper than that on the right. The brassards are of the usual type, with half bracelet elbow-cops. The gauntlets are fingered. The leg-armour consists of cuisses, knee-cops and jambs, the latter of which do not encircle the leg, and toe-caps for use with mail shoes.

As has been stated above, there are no entries in any of the Inventories which definitely refer to this suit.

(?) 1660, 1676. *Tilt Armour cap-a-pe richly guilte part engraven, part damasked, made for Prince Henry with two gauntlets and one gilt grandguard.*

(?) 1688. *Tilting Armour Capape Richly Gilt, part engraven and part Damaskt wth two gauntlets and one gilt grandguard made for Prince Henry* — — — — — — — — — — £208 0 0

90. **Armour of King Charles I when Prince (Plate XVII).**— Although there is no armourer's stamp on this suit the decoration of flowing lines and scrollwork is in the same style as that employed on armours known to be from the workshops of Petit. It has extra pieces, by the interchange of which the suit can be used for horse or foot.



BUCKLER OF PRINCE CHARLES
(II, 90).

For mounted use. The close helmet has a two-part visor with vision-slits in the upper part, and the lower portion is pierced with ten S-shaped openings on either side. The visor is held open by a spring pin on the right side, level with the eye. The beaver is kept closed by hooks, and there are three neck lames front and back. The breast is straight-fronted and is joined to the back by leather straps on which are riveted small plates of metal engraved to match the armour. The garderein is of five lames. The pauldrons and the brassards are joined together and cannot be separated. The gauntlets are of the

ordinary type, but the right hand has a pin about 1 in. high rising from the knuckles, the use of which is not apparent. Viscount Dillon has suggested that it was to prevent the hand from entering too far into the vamplate of the lance and getting crushed. The long cuisses of twenty lames each are attached to the knee-cops, which have slots on their lower extremities which engage pins on the greaves to admit of removal. The sollerets are square-toed and have spurs riveted on. Weight, 43lb. 14oz.

For dismounted use. The same breast and back are employed, and to the former tassets of two plates each are attached by hinges and turning-hooks. The surface of the tassets is embossed to simulate lames. A pot helmet such as pikemen used forms part of the equipment. Weight, 14lb. 13oz.

The circular shield decorated to match the rest of the armour was formerly in the collection at Windsor Castle. It was returned to the Tower by command of His Majesty the King in 1914.

91. **Armour of King Charles I (1625—1649), French (Plate XVIII).**—The Guide Books of the Tower dating from the early years of the XVIIIth century state that this armour was a present to the King from the City of London or from the Armourers' Company. Exhaustive researches in the Records of both bodies give no confirmation of either tradition, though it is quite possible that there may be foundation for it. The armour is engraved all over with weak, insignificant scrollwork, the design being much of the same type as that on No. 90, but less skilful in execution. The whole of the surface is gilded direct on the steel, and, as no interposing ground of silver was used, as was the case with the engraved suit of Henry VIII, the lustre of the gold is lost and the result dull and spiritless. The lines of the armour are ungainly in the extreme and recall the graceless suit made by Garbagnaus of Brescia for Louis XIV of France. There is but little constructional skill displayed, and the only interest in it lies in its historical associations with Charles I, who, according to Prince Rupert, never wore armour.

The close helmet is of the ordinary XVIIth century type, with small holes in the lower visor radiating from a centre, and a spring catch. The gorget is of two plates and retains its original lining of crimson satin. The breast is straight fronted and is joined to the back by gilt steel hinges. The pauldrons, brassards and gauntlets are of the usual type; and the long cuisses, of sixteen lames, are detachable at the seventh lame, and the greaves are also detachable from the knee-cops. On the upper lames of the cuisses are two upstanding pins pierced with holes, the use of which is not apparent. The sollerets are square-toed, and gilt six-pointed rowell spurs are attached to the heel of the greaves.¹ Weight, 77lb. 14oz.

The chanfron, stirrups and saddle steels, decorated to match the armour, will be found under VI, 59, 117, 118.

¹ The face of the figure was carved by Grinling Gibbons.

1660. *Upon a like horse one Curasseer Armour richly guilt and engraven, made for his late Majesty of ever blessed memorye, Charles the first. The horse Furniture being one shaffrone of the same and an old saddle.*
1676. *Armour Cappape richly guilt and graven made for King Charles ye 1st wth Gauntlett and Shaffron of the same and guilt steele for a sadle.*
1688. (Valuation.) *Armour Capape Parcell gilt made for K. Charles ye 1st, Horse Furniture being a large saddle of wood wth Bridle Pistol Stocks of wood Caps gilt and chased Baggs laced Holsters Breast Platt and Crupper ye Saddle covered wth Blew velvett Fringed Laced wth Stirrup Iron Leath' & Girth - - - £208 0 0*

92. **Armour of Charles II when Prince** (Plate XIX).—These pieces, made for a boy of about twelve years old, are embossed, engraved and silvered, and formerly gilt, the designs being the Prince of Wales' Feathers, trophies, and arabesques. The open helmet has a pivoted umbril with triple face-bars, ear-pieces of which one lame is missing on the left side and two on the right, nape-guard and plume-pipe. The gorget, of two plates, shows decoration similar to that on the rest of the armour, but more skilfully executed. The breast has a strong tapul and is scalloped at its lower margin. It is joined to the back by metal shoulder-straps.

1660, 1676. *Small Armour made for his now Majesty Charles the Second when he was Prince consisting of Breast, backe, gorgett and head-peece, all richly guilt.*

1683, 1691. (Valuations.) *Small Armour made for his late Matie. K. Charles^c II whn he was Prince consisting of Back, Breast, Gorgett & Head-peece all Richly Gilt - - - - - £25 0 0*


93. **Cuirassier's Armour (Early XVIIth Century).**—Consisting of close helmet, gorget, very narrow breast with sharp tapul, back, pauldrons, brassards, gauntlets, long cuisses of thirteen lames and knee-cops.

94. **Cuirassier's Armour (Middle of XVIIth Century).**—Consisting of close helmet, breast and back, articulated tassets of seven lames, jambs and sollerets. The tassets are fastened to the breast by large bolts and square nuts, and the whole suit is ornamented with a profusion of brass rivets.

95. **Cuirassier's Three-quarter Armour**, similar in style to the above, ornamented with brass rivets. The margins of the separate lames of the tassets and brassards are indented. On the left hand is a long bridle gauntlet. The knee-cops are ornamented with embossed crosses.

96. **Cuirassier's Armour**, similar to the above, but painted brown with gilt vertical stripes, decorated with arabesques in brown. Weight, 47lb.

97. **Cuirassier's Armour**, similar to the above. The helmet is of the burgonet type, with umbril, ear-pieces and neck-guard of simulated lames. The gorget, breast, back, pauldrons and gauntlets are of the ordinary type. The long cuisses, of fifteen lames each with knee-cops, are attached to the breast by pins and keyed slots.

98. **Cuirassier's Armour**, similar to the above. The burgonet has a fixed umbril, hinged cheek-pieces embossed outwards at the top in a  form to catch the edge of the umbril, and plume-pipe. The gorget is of three lames with roped upper edge. The breast, back, pauldrons, brassards, gauntlets, long cuisses of fourteen lames each, and knee-cops are of the usual type. The breast bears the stamp of the Armourers' Company of London. (See No. 110.)

99. **Cuirassier's Armour**, similar to No. 98. It is ornamented with rosettes of brass rivets, and the gauntlets are wanting.

100. **Cuirassier's Armour**, similar to the above. The close helmet has a series of holes in the right side of the visor, a visor-fork and neck-plates of two lames each, front and back. The breast, back, pauldrons, the right-hand gauntlet and bridle gauntlet are of the usual type. The long cuisses of eighteen lames each are detachable from the knee-cops at the fourteenth lame. The elbow-cops and knee-cops are embossed with radiating lines, and the whole suit is made up with brass rivets.

101. **Cuirassier's Armour**, similar to the above, with steel rivets.

102. **Cuirassier's Armour**, similar to the above. Consisting of close helmet, breast, back, pauldrons, brassards, right-hand gauntlet, bridle gauntlet, long cuisses and knee-cops. The pauldrons, elbow-cops, cuisses and knee-cops are ornamented with rosettes of rivets.

103. **Cuirassier's Armour**, similar to the above. Consisting of close helmet, breast back, pauldrons, brassards, right-hand gauntlet, bridle gauntlet, long cuisses of thirteen lames each and knee-cops.

104. **Cuirassier Black Armour (Middle of XVIIth Century)**.—Consisting of close helmet, breast, back, pauldrons, brassards, right-hand gauntlet, bridle gauntlet, long cuisses of thirteen lames each and knee-cops. The margins are left bright steel.

105. **Cuirassier's Black Armour**, similar to the above, except that the cuisses are of fourteen lames each.



Milanese Armour. (XVIth - XVIIth century.) II89.

106. **Cuirassier's Armour (Middle of XVIIth Century).**—Consisting of helmet, with movable umbril and visor cut out at its upper edge so as to form vision-slits when the umbril is closed, breast, back, pauldrons, brassards, bridle gauntlet; long cuisses of thirteen lames and knee-cops.

107. **Horseman's Half-armour (Late XVIIth Century).**—Consisting of open helmet, with pivoted umbril and nasal, breast, back, tassets of seven lames each, garderein of four lames and pauldrons of eight lames each. All the pieces are stamped "71." The Valuation of 1688 schedules such armours at 55s. each. Weight, 21lb.

108. **Horseman's Half-armour**, similar to the above, but stamped "42."

109. **Arquebussier's Armour (Early XVIIth Century)**, consisting of pot helmet, breast and back coarsely engraved with vertical bands of scrollwork, taces of two lames and garderein of four lames, attached to the back by pins and keyed slots.

110. **Pikeman's Armour (Middle of XVIIth Century)**, consisting of pot helmet, breast, back, tassets as simulated lames, ornamented with rosettes of rivets, and garderein of four lames. The helmet and breast bear the stamp of the Armourers' Company of London. The Valuation of 1688 schedules such armours at 17s. 6d. each. Weight, 17lb. 8oz.



No. 110

111. **Pikeman's Armour**, similar to the above. The helmet and breast bear the marks of the Armourers' Company of London.

Deposited on loan with the Worshipful Company of Armourers and Braziers, 1914.

112. **Pikeman's Armour**, similar to the above, russeted and embossed with lines in Vandyke pattern, consisting of pot helmet with ear-pieces, gorget, breast, back and tassets embossed with simulated lames. The hinges, shoulder-straps and rivets are of brass.

113. **Pikeman's Armour**, similar to the above, consisting of pot helmet, gorget, breast, back, tassets embossed to simulate lames and garderein of four lames. The breast and back are joined by very heavy steel shoulder-straps, and the tassets are riveted to the breast and not hinged, as is usually the case. The breast bears the stamp of the Armourers' Company of London and W.D.I.G.

114. **Pikeman's Armour**, similar to the above, consisting of pot helmet, breast, back, garderein of four lames, and tassets embossed to simulate lames, and ornamented at the lower margins with rosettes of rivets.

115. **Pikeman's Armour**, similar to the above. The pot helmet is embossed with lines. The breast and back are joined with metal shoulder-straps. The tassets are embossed to simulate separate lames, and have deeply scalloped edges. They are joined to the breast by hinges and linch-hooks. The garderein of four lames is attached to the back by pins and keyed slots. The breast bears the stamp of the Armourers' Company, and all the pieces are ornamented with brass rivets.



116. **Pikeman's Armour**, similar to the above, russeted with Gilt Lines, consisting of pot helmet; breast, bearing the stamp of the Armourers' Company of London; back; and tassets embossed to simulate lames.



117. **Pikeman's Armour**, similar to the above, consisting of pot helmet, stamped with the mark of the Armourers' Company of London and "H"; breast, back and tassets embossed to simulate lames. The hinges, shoulder-straps and rivets are of brass.

118. **Pikeman's Armour**, similar to the above, consisting of pot helmet, breast, back and tassets embossed to simulate lames, and ornamented at the lower margins with alternate hearts and diamonds. The helmet bears the stamp of the Armourers' Company of London, and the breast bears a proof mark similar to that on No. 127, the former showing also an N.

PIKEMAN'S ARMOUR (II, 117).

119—122. **Four Pikeman's Armours**, similar to the above, consisting of pot helmet, breast, back and tassets.

On loan to the official residence of the First Lord of the Admiralty.

123. **Armour of King James II (1685—1701)**. Plate XIX.—The open helmet is engraved and gilt, with bands of trophy work, and consists of the skull forged in one piece, neck-plates of four lames, ear-pieces, plume-holder, and umbril pivoted to the skull, with face-guard of pierced and engraved steel showing the Royal Arms and the initials "J. R." The breast and back are decorated with similar engraving and show the Royal Crown and "J. R. 2." The bridle gauntlet for the left hand, also



engraved and gilt, has a high knuckle-ridge.¹ The breast bears the proof mark.
Weight—helmet, 7lb. 8oz. ; breast, 15lb. 8oz. ; back, 11lb. 12oz.

124. **Armour for a Boy (Early XVIIth Century) incomplete.**—The close helmet has a two-part visor, the upper portion of which forms a reinforcing plate over the brow. The vision slits in this part are so placed that it is impossible to see through them, an example of the decadence of practical armour-craft at this period. The gorget, breast and back are of the usual type.

125. **Armour for a Boy (Early XVIIth Century) incomplete.**—The burgonet is made from a peaked morion, with a small back-turned point at the top. The gorget, breast, engraved with a fleur-de-lys, back, garderein of three lames and pauldrons of six lames each are of the usual type found in the Service armour of the period.

126. **Small Armour (period Late XVIth Century).**—The helmet is surmounted by a dragon crest. It was labelled "Richard Duke of York" between the years 1740 and 1821, and between 1821 and 1830 "Charles Prince of Wales." Hewitt suggests that it was made for a dwarf. This may have been the case, or it may be merely a model made by a workman in the Armouries.

Height 2ft. 10in.

127. **Japanese Armour (Late XVth Century), sent by the Shogun of Japan, Iyeyasu, to King James I.**—This armour is doubtless one of those mentioned by Harris in his *Navigantium atque Itinerantium Bibliotheca*, as having been presented to Captain Saris to be conveyed to the King, together with a letter of affection, and privileges for the East India Company. Saris returned to Plymouth in September, 1614, and was ordered to proceed to London to answer certain charges of embezzlement of the Company's monies. The records of the Company give several lists of Japanese works of art which were forwarded to London, but make no mention of the armour. At the Restoration one of these suits was exhibited at the Tower as "a present to Charles II from the Great Mogul." As has been stated on Page 7, it is more than probable that these armours were handed over to Charles I when a boy, and were brought to light on his Restoration, and, their provenance being forgotten after nearly fifty years, they were classed with all other Oriental examples, as coming from India.²

¹ The head of the figure on which this Armour was mounted (1827-1915) was a portrait of Charles II by Grinling Gibbons. The buff coat was modern, the boots were cavalry boots (*circa* 1700), and the horse furniture and holsters belonged to William III. The Armour is now shown unmounted in a case.

² Japan was closed to all Europeans except a handful of degraded Dutchmen from 1637 to 1870.

The helmet (kabuto) consists of a skull-piece, with narrow lames of lacquered steel laced together horizontally to form a neck-guard (shikoro). On the inside is the signature of the maker in red lacquer, IWAI YOZANEMON OF NAMBU, a member of a family of armourers of Northern Japan. The



JAPANESE ARMOUR (II, 127).

Sent to James I by the Shogun.

mask (men) has no nose-guard. The body armour (do) consists of long lames of lacquered steel laced together in horizontal bands; the face of the lames is fashioned to simulate small bones or quills. At the neck is a horizontal plate of metal lacquered, bearing the owner's badge (Ken-Hanabishi, a flower, lozenge and a Chinese sword blade) repeated four times. In the centre is a small plaque of copper bearing two chrysanthemums as buttons. The tassets (kusazuri) form part of the cuirass. The pauldrons (sode), 14½ in. wide, are formed of the same material as the rest of the armour. The greaves (suneate) are of three plates each, with knee-cops of two plates, very skilfully forged to follow the lines of the



No. 127.

leg. In the early guide books of the XVIIIth century this armour is described as being made of quills "slipping over one another very artificially."

1550, 1676, 1683. *Armour sent his now Majestie, Charles the Second by the Great Mogul consisting of backe, breast, Taces, headpeece, vizor, and peecees of the Greaves.*

1688. (Valuation.) *Armour sent his Late Maj^{tie} K. C. ye 2nd by ye Great Mogul consist^s Back, Breast, Taces, headpeece, Vizzard & a pr. of Greaves* - - - - - £5 0 0

128. Japanese Armour (XVIth Century), probably sent with the preceding example to King James I by the Shogun of Japan in 1611.—The helmet, introduced by the Hinero family of armourers, is



JAPANESE ARMOUR (II, 128).

merely a skull-cap with small lames at the neck. The mask has ear-pieces, which is rather unusual in armour of this period. There are holes for attaching false hair, and a large hole under the chin to let out the perspiration. One of the pins on the chin is missing. The nose-guard was originally detachable, but, like many other removable pieces of armour in the Collection, it has been firmly riveted down. The body armour consists of lames of lacquered iron, 2in. wide, laced together horizontally. The back (se-ita), with its tasset, is arranged to overlap the sides of the cuirass to allow of the armour being worn by a stout man. At the neck is a plate of lacquered iron bearing an oblong copper plate, on which are set two small buttons bearing a cross-shaped device, the Chinese figure "10," possibly the sign of a Samurai family. The pauldrons bear the same badge repeated several times. The brassards (kote) are formed of small,

oblong plates, 2 $\frac{3}{4}$ in. by 1in., joined together by links, the whole mounted on a green velvet sleeve of recent date. The back of the hand has the knuckles simulated in the metal, and the badge, which appears on the cuirass, is set in larger size on the left hand; that on the right is missing. In Hewitt's time there was a tradition that this armour had been worn by the Moors of Granada, and that it had come from the Royal Armoury at Segovia.¹

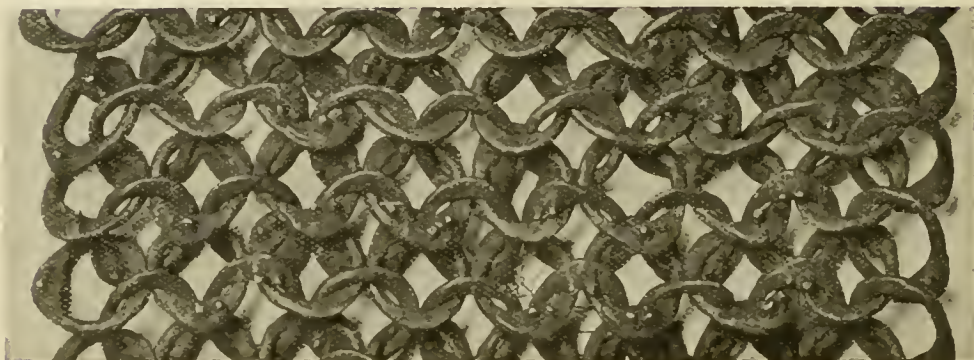


No. 128.

¹ Hewitt, *The Tower*, 1841.

CLASS III : DETAILS OF ARMOUR.

Mail.



DOUBLE RIVETED MAIL (III, 34).

1. Shirt of mail.
2. Shirt of mail.
3. Shirt of mail, with collar of doubled links, the uppermost row of latten.
4. Shirt of mail, the links all riveted ; the shirt slit up in front for some 9in.
5. Large shirt of mail, with lower edge vandyked, and the cuffs of latten links ; all the links are riveted.
6. Shirt of mail, much torn, the links all riveted.
7. Short jacket of mail, the links all riveted.
8. Shirt of mail without sleeves, the links all riveted.
9. Shirt of mail without sleeves, small links all riveted, latten links along the borders ; opens at the side.
10. Shirt of mail, alternate riveted and cut links.
11. Shirt of mail, links all riveted.
12. Shirt of mail, links very thin and all riveted.

13. Cape of mail.

14. Cape of mail.

15. Standard, or collar, of mail (XVth-XVIth Century), about $6\frac{1}{2}$ in. deep; the four top rows of links are doubled with the remains of the hooks for fastening it round the neck. There are nine rows of links below the four double ones. The edge is plain, and there are no brass links, as in the British Museum example.

16. Sleeve of mail, with links all riveted, and latten link border.

17-18. Pair of sleeves of mail, with latten links at the edge.

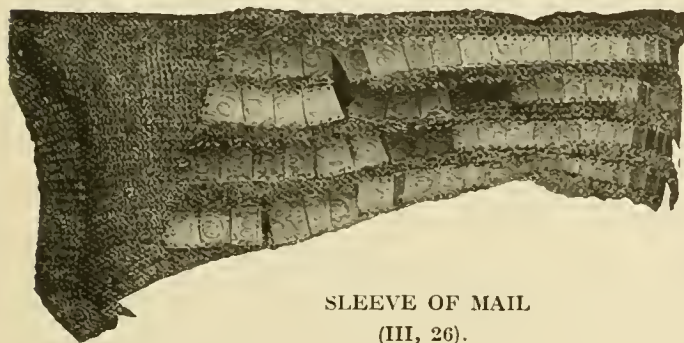
19-20. Pair of sleeves of mail.

21. Sleeve of mail, the links all riveted.

22-23. Sleeves of mail, very small links, the links at the margin are of latten; the cuff is formed of doubled links.

24-25. Two sleeves of mail, the links riveted and welded.

26. Sleeve (XVIth Century) of mixed mail and plates. The chain mail links are riveted, and are about $\frac{1}{5}$ in. in diameter; on the plates are gilt figures of flowers and birds arranged in no order. The plates are in vertical lines, with rows of three links between each.



SLEEVE OF MAIL
(III, 26).

From Madrid. Purchased at Christie's in 1839.

27. Hood of mail, with small face opening; the links are all riveted.

28. Hood of mail, with face opening; the links are alternately riveted and cut.

29. Hood of mail, much damaged; the links are all riveted.

30-31. Pair of mail leggings.

32-33. Pair of mail leggings formed of large links.

34. Fragment of very large riveted mail; the links are about $\frac{3}{4}$ in. in diameter, and are closed with cramp rivets.

35. Fragment of large mail; the links, about $\frac{3}{8}$ in. in diameter, are closed with cramp rivets.

36-42. Seven pieces of mail.

43. Egyptian mail armour. Made in England for the Khedive's Body Guard in 1882.

Coats of Defence.



JACK (III, 44).

44-46. Three doublets of defence, or Jacks (XVIth Century). These are made of stout canvas, with metal plates about 1in. square laced between the outer covering and the lining. On the outside the lacing shows a pattern of squares with diagonal lines, and the points where the laces penetrate are marked by tufts of worsted.¹

47-48. Brigandines (Early XVIth Century) consisting of small plates of steel riveted between layers of canvas, with an outer face of crimson velvet. The rivet heads which show to the front are gilt.²

49. Portions of Brigandine armour.

¹ For details of their manufacture see Record Office, S. P. Dom. Eliz., CVI, 65.

² These defences used to be shown with the mask helmet IV. 22, as the armour of Will Somers, the jester (see Page 25). Up to the year 1627 there was an official at the Tower styled the Keeper of the King's Brigandines, an office abolished by Charles I (see Page 39).

50. Padded breast (Late XVIIth Century), known as "Silk Armour," composed of quilted cotton lining with a covering of rose coloured silk. Deposited on Permanent Loan by the Curators of the Pitt-Rivers Museum, Oxford, in 1915.¹

Gorget.

51. Gorget (Early XVIth Century) of three plates, back and front, the latter decorated with scrollwork similar to that found on No. 76.

52. Gorget of George Cifford, Earl of Cumberland (XVIth-XVIIth Century), by Jacobe or Pickering, embossed and recessed with thistles, unfinished. It resembles the armour shown on Plate 20 of the *Armourers' Album* referred to on Page 5 of the present work.

53. Gorget for a boy (XVIth-XVIIth Century), engraved with trophies, etc.

54. Gorget (XVIth-XVIIth Century) of six lames, with roped upper margin.

55. Gorget (XVIth-XVIIth Century) of eight lames, with scalloped lower margin.

56. Gorget (XVIth-XVIIth Century) of two plates, with scalloped margin.

57. Pikeman's Gorget (Middle of XVIIth Century), with embossed lines and brass rivets.

58. Gorget (XVIIth Century) of four lames, back and front, with cabled upper margin.

59-60-61. Three Gorgets.

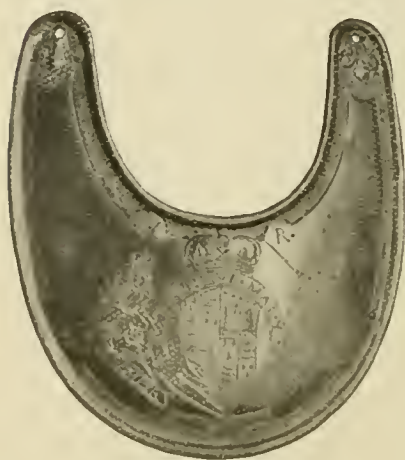
62. Front portion of a Gorget.

63. Front portion of a Gorget (XVIIth Century) with lines engraved.

¹Roger North in his *Examen* states that the members of the Green Ribbon Club, a Protestant Association, formed about the year 1680, wore such defences as a protection against assassination, and that "... abundance of these silken backs, breasts, and potts was sold that were pretended to be pistol proof." There is a complete set of this armour in the Pitt-Rivers Museum, Oxford, which came from the cellars of the old Ashmolean Museum. Grose (*Military Antiquities* I, plate 35) gives an illustration of similar defences.

64. Back plate of a Gorget (XVIIth Century), engraved with bands of trophy work.

Brought from Malta in 1826.



OFFICER'S GORGET (III, 66).

65. Gorget of embossed steel (Late XVIIth Century), showing a figure in Roman armour (Louis XIV?) surrounded by prisoners, trophies, etc.

66. Gorget of gilt brass, engraved with the Royal arms; the crown and A. R. over the motto SEMPER EADEM. Worn by officers in the reign of Queen Anne (1702-1714).

Dimensions, 6in. broad and 7in. deep.

67. Gorget of cast iron, showing a combat of mounted men in the armour of the early XVIIth Century.

68. Gorget of cast iron, showing a combat of warriors in the costume of the early XVIth Century.

Breast and Back Plates.

69-70. Cuirass (Late XVth Century). The breast is articulated in two parts, with three lames at the waist. There is a heavy hinged lance-rest (No. 448) and plate gussets. The back in three parts, articulated with three waist lames. All are embossed with radiating flutings, and the margins are scalloped. There is an armourer's mark on the breast, possibly that of Conrad Lochner.



No. 69.

71-72. Cuirass (Early XVIth Century), consisting of breast, back and articulated lames at the waist, three in front and two at the back. There is a lance-rest bracket of four teeth, and the arm and neck openings are of thickened, not turned over, metal. The breast and back bear the armourer's mark.



No. 71-72.

Weight, 12lb.

73. Breastplate (Early XVIth Century), with plate gussets and four articulated lames at the waist.

Weight, 7lb. 14oz.

74. Globose Breastplate (Early XVIth Century), engraved with decoration, much worn, which includes the Virgin and Child and a large Maltese cross. On one shoulder is engraved St. George and the Dragon

and on the other an eagle displayed. The plate gussets and neck-space have roped edges. It has been repaired on the left side, where it has been pierced.

Weight, 4lb. 3oz.

75. Breastplate (Early XVth Century), with radiating flutings and bold cabled margins.

Weight, 7lb.

76-77. Globose Breast and Back (Early XVth Century) of very pronounced form, with plate gussets boldly cabled on the margins. The breast is engraved with the Burgundian Saltire Raguly and the figures of saints. The back plate is engraved with armed figures (see No. 51).

78. Globose Breastplate (Early XVth Century), with plate gussets.



FLUTED BREASTPLATE
(III, 79).

79. Globose Breastplate (Early XVth Century), with plate gussets, and articulated lame at the waist. The neck opening and gussets have boldly cabled margin.

Weight, 5lb.

Purchased at the Bernal Sale in 1855.

80. Globose Breastplate (Early XVth Century), fluted. It has plate gussets, and an articulated lame at the waist.

Weight, 4lb.

81. Breastplate (German, Early XVth Century). It has a tapul ridge and plate gussets with roped margins. In the centre is engraved a coat of arms, much obliterated.

Inside two strips of iron are riveted for some purpose unknown.

Weight, 6lb. 4oz.

Purchased at the Bernal Sale in 1855.

82. Breastplate, similar to the above, but without gussets or engraving.

Weight, 5lb. 8oz.

83. Breastplate (Middle of XVth Century), with strongly marked tapul, and plate gussets with roped edges.

84. Globose Breastplate (Middle of XVth Century), with tapul or medial ridge.

85. **Globose Breastplate (Middle of XVIth Century)**, with strong turnover at the upper margin. Plate gussets and taces of four lames.

86. **Globose Breastplate (Middle of XVIth Century)**.

87. **Splinted Breastplate (XVIth Century)** of seven lames.
Weight, 9lb.

88-89. **Splinted Cuirass (XVIth Century)**, with fifteen lames in the breast and sixteen in the back.

90-91. **Splinted Cuirass (XVIth Century)**, with embossed decoration on the chest. There are eleven lames in the breast and twelve in the back.

Purchased at the Bernal Sale in 1855.

92. **Splinted Breast (Middle of XVIth Century)** of thirteen lames, with scalloped margins.
Weight, 6lb. 2oz.

93. **Splinted Cuirass (Middle of XVIth Century)** of twelve lames each, with plate gussets.
Weight complete, 11lb. 8oz.

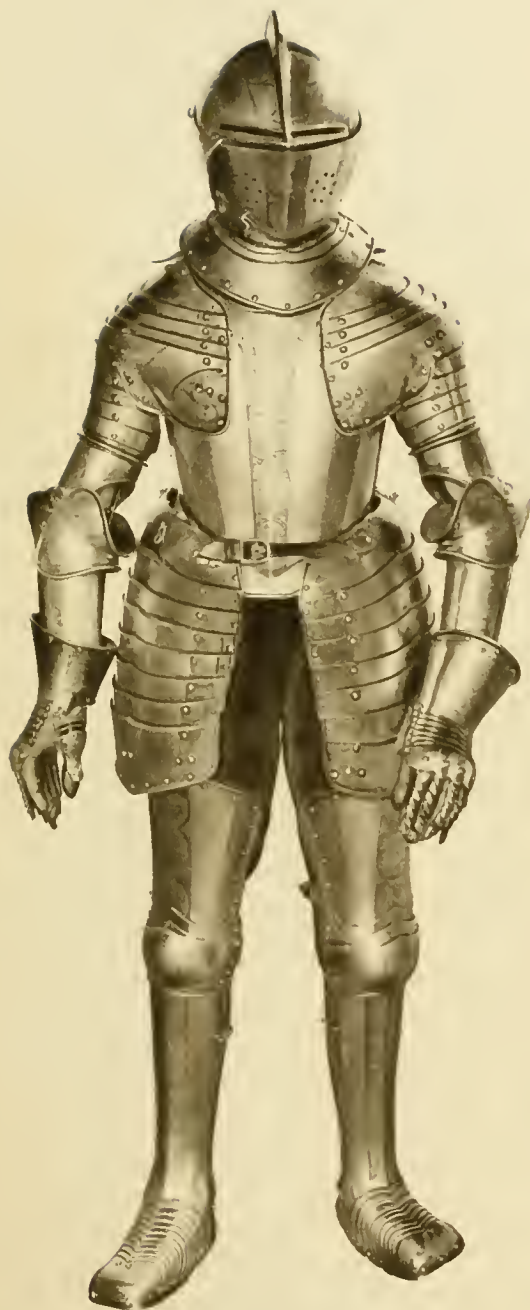
94-95. **Long splinted Cuirass (XVIth Century)** of twenty-two lames. The upper part of the breast and the whole of the back are articulated by rivets working in long slots. The whole is reminiscent of the Roman lorica.

96-97. **Tilting Breast and Back plates (XVIth Century)**; the lance-rest and queue are fixed to the breast.

98. **Breastplate (Middle of XVIth Century)**. The tapul is brought forward in a sharp point halfway down; the upper margin is roped.
Weight, 9lb. 8oz.

99-100. **Breast and Back plates (Late XVIth Century)**, richly engraved with classical warriors, trophies, etc.
Weight : breast, 4lb. ; back, 2lb. 10oz.

101-102. **Breast and Back plates (Late XVIth Century)** for tilting. The breastplate has plate gussets, one articulated lame at the waist, and three large bolts with square nuts on the left side for attaching a reinforce piece, There is a large bolt on the back-plate for attaching the headpiece.
Weight complete, 12lb.



II. 88



II. 90

Armours of Prince Henry and Prince Charles.

103. "Waistcoat" Cuirass (Late XVth Century), opening in the centre, and fastened by three hooks and staples. It has been used for testing, as it has been pierced back and front by a bullet.

Weight, 7lb. 2oz.

Purchased from the Earl of Shrewsbury's collection in 1857.



"WAISTCOAT" CUIRASS
(III, 104).

104. "Waistcoat" Cuirass (Late XVth Century), engraved with scrollwork. It opens down the centre, and is fastened by three hooks and staples. Portions of the original leather lining remain.

Weight, 17lb.

105. "Waistcoat" Cuirass and Gorget (Late XVth Century), engraved with stripes chevron fashion. The breastplate has plate gussets, and a strongly marked tapul, with copper rivets to represent buttons. It opens in the centre, and is kept closed by a staple and pin. The gorget, of similar design, fits over the cuirass, and is secured by turning-pins on the breast and back plates.

Weight, 30lb. 12oz.

106. Breastplate (Late XVth Century), riveted down the centre; possibly this is a part of a "waistcoat" cuirass. It bears a bullet mark on the right side.

Weight, 10lb. 2oz.

107. Breastplate (Late XVth Century), with scalloped lower margin, much damaged by musket and cannon shot.¹

Weight, 13lb.

108. Breastplate (Late XVth Century), with roped upper margin.

Weight, 4lb. 3oz.

109. Breastplate (Late XVth Century), engraved with a ribbon, from which hangs a Maltese cross on the left side. Near the neck are two small medallions showing the Annunciation.

¹ The guide books of XVIIIth Century state that the wearer "had his bowells shot out," and that the Prince Regent on hearing the story replied that he had read of a soldier whose head was cloven to the chin, but that on binding his head together he "drank his pot of ale and recollected not that he had been hurt."



BREASTPLATE (III, 110).

110. Breastplate (Late XVth Century) of the "peascod" variety, engraved with a chain, from which hangs a Maltese cross. Below this is a small figure of Fortune with a sail.

111. Breastplate (XVth Century), with engraved lines. It bears an Armourer's mark near the neck.



NO. 111.

112. Small Breastplate (Late XVth Century).

Weight, 14lb.

113. Breast and Back plate (Late XVth Century), engraved with trophies.

114-115. Breastplates (North Italian, Late XVth Century), engraved with trophies of arms.

On loan to the Maison Dieu, Dover.

Nos. 109-115. Brought from Malta in 1826.

116. Breastplate (Late XVth Century), with articulated lower lames.

117. Engraved and Gilt Breastplate (Late XVth Century) of poor workmanship.

118. Breastplate (Late XVth Century) of the "peascod" variety, covered with engraving of foliage and birds, formerly gilt.

Weight, 9lb. 9oz. Purchased at the Bernal Sale in 1855.

119. Breastplate (Late XVth Century) of the "peascod" variety. A ribbon is engraved from which hangs a crucifix.

120. Breastplate (Late XVth Century) of the "peascod" variety, with scalloped lower margin. It has been pierced by one bullet and dented by another.

Weight, 9lb. 12oz.

121. Breastplate (Late XVth Century), embossed with a Maltese cross. It is of the "peascod" variety, and has an escalated lower margin. It has been dented by a bullet in the centre.

Weight, 19lb. 4oz.

122. Breastplate (Late XVth Century) of the "peascod" variety, with roped margin.

Weight, 15lb. 2oz.

123. Breastplate (Late XVth Century), with marked tapul and wide lower margin.

Weight, 19lb.

124. Breastplate (Late XVIth Century), engraved at the arm openings with bands of scrollwork parcel gilt, with cabled margins. The lower portion of the breastplate is articulated.

Weight, 6lb. 2oz.

125. Long Breastplate (Late XVIth Century), with one articulated lame at the waist and plate gussets. The margins are roped.

Weight, 3lb. 8oz.

126. Breastplate (Late XVIth Century) of the "peascod" variety, with shoulder pieces of steel. It is stamped with a x. Possibly this is a "double," or "double" on which breastplates were made.¹

Weight, 13lb. 12oz.

127. Breastplate (Late XVIth Century), engraved with Maltese cross.

128. Breastplate (XVIth-XVIIth Century), with articulated lames at the waist, and plate gussets, all with scalloped margins.

Weight, 4lb.

129-146. Eighteen Breastplates (XVIth-XVIIth Century).

On loan to the Maison Dieu, Dover.

147. Breastplate (XVIIth Century), roughly engraved with a Maltese cross. There are several bullet marks, one of which is probably the proof mark.

Weight, 13lb.

148. Breastplate and Placate (Middle of XVIIth Century). There is a bullet mark on the left side of the placate, which has dented the breastplate. The breastplate bears the letters R.H. under a crown, and the placate bears the Royal Proof Mark.



No. 148.

Weight : placate, 5lb. ; breastplate, 16lb.

149. Breastplate (Late XVIIth Century), dented by six bullets, painted black. It bears the mark of the Armourers' Company of London, similar to those on II, 110.

150-151. Pikeman's Breast and Tassets (Middle of XVIIth Century), blacked.

¹ See *The Armourer and His Craft*, Page 28.

152 THE ARMOURIES OF THE TOWER OF LONDON.

152-153. Breast and Back plates (Late XVIIth Century), painted black.

Weight, breast, 10lb. 8oz. ; back, 18lb.

154. Breastplate (Middle of XVIIth Century), unfinished, with studs for shoulder straps and hooks for waist strap.

Weight, 8lb. 8oz.

155-156. Breastplates, similar to the above.

157. Breastplate (Late XVIIth Century), painted.

158. Breastplate, with brass studs and hooks.

159-160. Breastplates.

Weight, 15lb.

161. Breastplate (XVIIth Century), formed of two plates, one over the other, with heavy roped margin. The upper plate has been pierced by a shot and the lower plate dented. There are faint traces of an engraved chain and badge on the front.

Weight, 15lb. 12oz.

162. Breastplate (Late XVIIth Century) of large size.

163-165. Three Breastplates (Late XVIIth Century), painted black.

166. Breastplate (Late XVIIth Century), stamped a proof mark. The letters *i.c.* are roughly engraved on the neck.

Weight, 16lb. 8oz.



No. 166.

167. Breastplate of proof (Late XVIIth Century), painted black.

168. Breastplate for Pikemen.

169. Breastplate for Pikemen.

170. Breastplate and Placate (Late XVIIth Century), with bullet dent on the left side. The breast is marked *c.R.* under a crown, and the placate *R.H.* under a crown.

Weight : placate, 7lb. ; breast, 8lb.

171. Breastplate and Placate (Late XVIIth Century). Both bear the letters *c.R.* under a crown.

Weight : placate, 8lb. ; breast, 14lb.

172. Breastplate (XVIIth Century), covered with undressed ox hide on both sides.

173. Breastplate of rough workmanship.

174. Breastplate.

175. Breastplate (Late XVIIth Century), with simulated taces and false rivets.

176. Breastplate (Late XVIIth Century), marked with R.H. under a crown.

177. Breastplate (XVIIth Century), stamped with the letter B under a crown.

178. Breastplate (Late XVIIth Century).

179. Breastplate of proof (XVIIth-XVIIIth Century).
Weight, 14lb.

180. Breastplate (Late XVIIth Century), formed of two plates riveted one over the other.
Weight, 26lb.

181. Breastplate (Late XVIIth Century), painted black.

182. Breastplate (Late XVIIth Century), with brass studs.

183. Breastplate.

184-396. Two hundred and thirteen Breasts and Backs (XVIIth Century), stamped TOIRAS. They were captured from a French ship at the period of the siege of Rochelle, in 1627, which culminated in the repulse of the English forces at the Isle of Rhé. Some of the backs are probably of English make and are of hammered iron, whereas the French breasts are of rolled iron, as may be seen from the marks on the inner sides. There are two patterns of the breasts.

INVENTORIES :

1676. <i>Armes of the Toryas Provision Backes</i>	236.
<i>Brestes</i>	229.

1688. (Valuation.) *Arm^r. of Toiras Prov^{on} 339 Backs at 8^s a p^{ce}, 239 Breasts at 8^s a p^{ce}.*

397-399. Breasts and Tassets (Middle of XVIIth Century) for Pikemen.

On loan to the Maison Dieu, Dover.

400. Placate for a Breast (XVIIth Century), with two semicircular pieces cut out of the lower edge.

Weight, 8lb.

401. Part of a Breastplate.

402. Two lower lames of a Breastplate.

403. Three lower lames of a Breastplate (Early XVIth Century), engraved with borders of scrollwork.

404. Breastplate (Late XVIIth Century).

Weight, 21lb.

405. Breastplate (Late XVIIth Century).

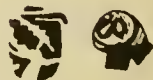
Back Plates.

406. Back-plate (XVth Century), with slight embossing and three lames over the loins.



BACK-PLATE
(III, 406).

407. Back-plate (XVIth Century), with radiating flutings, stamped with two armourers' marks.



No. 407.

408. Back-plate (Middle of XVIth Century) with three articulated lames at the base and garderein.

409. Back-plate (Late XVIth Century), engraved with trophies, etc.

Brought from Malta in 1826.

410. Back-plate, embossed.

411. Back-plate (Late XVIth Century), engraved with classical figures.

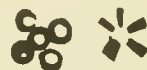
Purchased at the Bernal Sale in 1855.

412. Back-plate (XVIth Century), engraved with chevron lines meeting at a fleur-de-lys, the lower margin scalloped.

413. Back-plate, made up of pieces of XVIth Century armour.

414. Back-plate (Late XVIth Century). In the centre is engraved a nude figure of Fortune holding a sail. There are three bands of floral designs, and between these are lions rampant, crowns and ostrich feathers, the badges of the owner.

415. Back-plate (Early XVIIth Century), stamped with an armourer's mark.



No. 415.

416. Back-plate (Early XVIIth Century), engraved with bands of decoration and a figure of S. Barbara.

Transferred from Dover Castle in 1915.

417. Back-plate.

418. Back-plate (XVIIth Century).

419. Back-plate (Late XVIIth Century).

420. Back-plate, indented by a bullet.

421-422. Back-plates (Late XVIIth Century) rough and unfinished.

423. Back-plate (XVIIth-XVIIIth Century).

Weight, 16lb. 8oz.

424. Back-plate of 19½lb.

425-429. Five Cuirasses (Early XIXth Century) for Royal Horse Guards.

430. Breastplate, Royal Horse Guards, steel edged.

431-693. Two hundred and sixty-two Breast and Back plates, French (Early XIXth Century).

Brought from France in 1815.

694. Breastplate of French Carbineers, faced with brass, 1835.

695. Breastplate of French Carbineers, 1835.

696-697. Breastplate and Back-plate of French Imperial Guard, 1858.

Presented by the Emperor Napoleon III. *circa* 1855.

Body Armour.

698. Culet of plates (XVIth Century), engraved with stars, mounted on leather.

Purchased *circa* 1862.

699. Culet of so-called "Penny plate" armour, consisting of discs of iron riveted on to leather. There is absolutely no foundation for Hewitt's statement as to the name of such armour. It may be part of a rude defence, possibly from Scotland, but it is much more likely to be one of the modern acquisitions of the middle of the XIXth Century.

700. Culet (XVIth Century) of three lames, the upper of which is turned inwards. It is engraved with bands of coarse decoration.

701. Culet (Middle of XVIth Century) of small plates, mounted on silk lined with canvas, the edges being fringed with very fine mail. The plates are tapered, and measure, roughly, from $1\frac{1}{2}$ in. by $1\frac{1}{2}$ in. to $1\frac{1}{2}$ in. by $\frac{1}{2}$ in. The smaller plates at the top are bent to an obtuse angle to fit over the hips. They are engraved alternately with eight pointed stars and crowns with cross palm branches parcel gilt.

702. Lower lame of a Culet (Late XVIth Century), finely embossed, engraved, damascened and parcel gilt. The decoration consists of trophies on a russet ground.



EMBOSSED CULET (III, 702).

This piece appears to have come from Madrid and was purchased at Christie's in 1839.

703. Portion of a Culet (Late XVIth Century), engraved with trophies of arms and gilt.

704. Culet.

705. Three parts of a fluted Culet (XVIth Century).

706. Waist-piece.

707. Gardereins (XVIIth Century) of four lames, with serrated upper margins.

Weight, 5lb. 12oz.

708. Gardereins, similar to the above.

Weight, 4lb. 2oz.



Armour of King Charles I., II. 91.

Taces, Tassets and Brayettes.

709-710. Pair of short Taces (Late XVth Century) of six lames each, engraved with bands of arabesques and parcel gilt. They have the original buckles, or "tacejoynts," for attachment.

711-712. Pair of Taces of seven lames each.

713. Tace (Late XVth Century) of four lames, engraved with triple border of foliage.

714-715. Portions of Taces (XVth Century), with broad embossed cable margin.

716. Part of a Tace (North Italian, Late XVth Century), embossed and engraved with medallions and flowing border. The decoration is similar to that on the Maltese suits II. 44-72.

717. Part of a Tace (Late XVth Century), similar to the above.

718. Tace (Middle of XVIIth Century) for the left thigh. It consists of eleven lames with keyed hole for attachment to the cuirass and pins on the lowest lame for attaching cuissards.

719-721. Portions of Taces, with serrated margins and brass rivets.

722. Portion of a Tace, with scalloped edges and brass rivets.

723. Part of a Tace.

724. Two portions of a Tace.

725-726. Pair of Tassets (XVth Century), each engraved with a star. The margins are roped, and are engraved with flowing scrollwork. These are part of the same suit as No. 51.

727. Large Brayette, with embossed lines down the centre and side-plates.

728. Brayette, belonging to suit II. 24., embossed with a fleur-de-lys, and attached by a turning-pin.

729. Brayette, painted black and gold; part of the suit II. 33.

730. Small Brayette, with holes round the rim for attachment of chain mail or fabric.

Pauldrons, Brassards, etc.

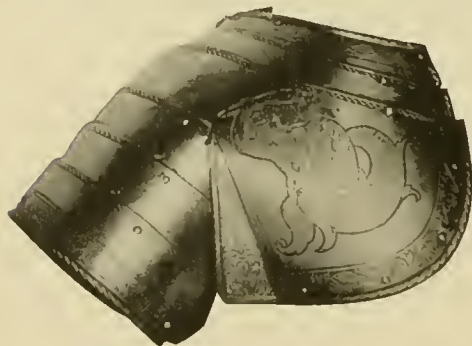
731. Pauldron and Rerebrace (XVth-XVith Century), left, fluted, the edges of the lames scalloped.

732. Pauldron and Rerebrace (XVth-XVith Century), right, fluted, the edges of the lames dentated. A large pin is riveted on to the pauldron.

733. Top-plate of a Brassard (Early XVith Century), fluted.

734-735. Pair of Pauldrons and Brassards (Middle of XVith Century), left. The pauldron has a high neck-guard turned up from the main plate, which is engraved with a star. The rerebrace is attached to the pauldron by a slot in the latter and a turning pin on the former. The fan-plate of the elbow is engraved with a decorated saltire, and the elbow is protected by turning outwards, the upper part of the vambrace almost at right angles. (See No. 51.)

736-737. Pair of Pauldrons (Late XVith Century), by Conrad Lochner of Augsburg, engraved with figures of Tritons. The left pauldron bears the Nuremberg, that on the right bears Lochner's mark.



PAULDRON (III, 736).



Nos. 736-737.

738. Pauldron and Brassard (XVith Century), right arm engraved with triple bands of flowing designs.

739. Pauldron (Late XVith Century), right arm; with neck-guard riveted on, and bands of trophy work engraved.

Brought from Malta in 1826.

740-741. Pair of Pauldrons, with iron buckles for attachment.

742-743. Portions of Pauldrons of two and three lames.

Weight: 742, 2lb. 4oz.; 743, 5lb. 9oz.

744. Lower lame of a Pauldron.

745. Pauldron and Brassard (XVIIth Century), left.

746. Pauldron and Brassard (XVIIth Century), left.

747. Pauldron and Brassard (XVIIth Century), left.

748. Pauldron and Brassard (XVIIth Century), left, ornamented with brass rivets. The margins of the lames are scalloped. The pauldron bears an armourer's mark.



No. 748.

749-750. Metal Shoulder Straps for breast and back-plate.

751. Top-plate of a Brassard with fluted edge.

752. Brassard (XVIth Century), right. The edges of the lames are dentated, and there are embossed roped lines on the rerebrace, elbow-piece and vambrace. The rerebrace has a turning-pin for attaching the pauldron.

753-754. Pair of Brassards (Early XVIth Century), with wide elbow-guards and original lining.

755. Pair of Brassards (Early XVIth Century), with narrow flutings and cinquefoil embossed on the back of the elbow.



BRASSARD (III, 759).

756. Half-brassards, consisting of one side of the rerebrace and vambrace, and also the elbow-cop.

757-758. Pair of Brassards (Late XVIth Century), engraved with decorations of trophies, etc., and parcel gilt, the margins roped.

759. Brassard (Late XVIth Century), coarsely engraved with trophies, etc. On the fan is engraved St. George in classical armour. The metal is russeted and gilt.

760-761. Two Demy Brassards.

762. Elbow-cop (Late XVth Century).

763. Large Elbow-cop (Early XVIth Century), boldly fluted and cabled.

764. Elbow-cop (XVIth Century), richly embossed with a two-headed eagle displayed, under a double-crowned tiara, holding a shield charged with a cross, the arms of Gonzaga, Duke of Mantua. The border consists of a flowing vine pattern.



ELBOW COPS (III, 764, 765).

765. Elbow-cop (Late XVth Century), engraved with arabesques, and parcel gilt. The decoration on this piece is of precisely the same type as that found on Sir John Smythe's Armour, made by Jacobe (II. 85A), and probably belonged to another suit by the same maker.

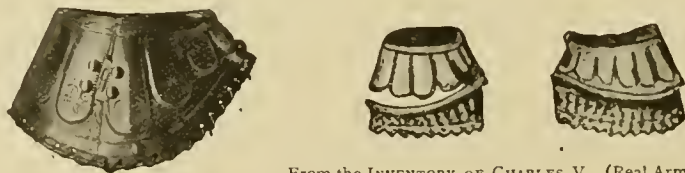
766. Vambrace (Early XVth Century), for left arm; engraved with lines, and closed with a hinged plate and turning-pin.

767. Vambrace (Early XVth Century), engraved with bands of flowing design.

768. Vambrace (XVth Century), engraved with lines.

769. Portions of a Vambrace.

770. Portion of a Vambrace (Late XVth Century).



CUFF (III, 771).

From the INVENTORY OF CHARLES V. (Real Armeria, Madrid).

771-772. Pair of Cuffs, engraved and gilt, with edging of links of mail. They are figured in Charles V's Inventory. The late Curator of the Royal Armoury at Madrid, Count Valencia, considered that they were made by one of the Colmans, and that they formed part of the suit A.49-64, Madrid. (See *Jahrbuch der Kunsthistorischen Samlungen*, X.)

Purchased at Christie's in 1839.

Gauntlets.



PART OF A GAUNTLET (III, 773).



(III, 774).



(III, 775).

773. Part of a Gauntlet (XIVth-XVth Century). It was originally covered with velvet or leather, and the ornamental studs for attaching the same are still in place.

774. Gauntlet for Barriers (XVth Century). It is like the manifer, but has two small plates so arranged as to prevent the opponent's sword or sword point passing between the holder's hand and weapon.

Weight, 2lb. 8oz.

775. Locking Gauntlet for the tourney (XVth Century), engraved and embossed. The last joint of the finger-guard is prolonged to overlap the wrist when the hand is closed. It is fastened over a pin on the wrist.

776. Manifer, or main-de-fer (XVth Century), for the left hand. It consists of three plates, with two small plates for the thumb, the last joint being embossed in imitation of the nail.

777. Manifer (XVth Century), consisting of cuff-piece and two lames. Above the wrist is a hole for a disc similar to that on II.8.J.

778-779. Pair of Mitten Gauntlets (Middle of XVth Century).

780. Mitten Gauntlet, the fingers finely ridged. The whole is engraved with bands of flowing scrollwork, amorini, etc.



MITTEN GAUNTLET (III, 781).



GAUNTLET (III, 787).



(III, 788).

781. Mitten Gauntlet (right), with roped knuckle ridge, and bands of engraving gilt.

782-783. Pair of Mitten Gauntlets (Middle of XVIth Century), with flutings and delicately dentated edges. The knuckles are sharp four-sided points. They bear an armourer's mark.



Nos. 782-783.

784-785. Pair of Mitten Gauntlets embossed with indented stripes, cable knuckle ridge and pointed cuffs. Five lames below and five above the knuckle ridge are articulated.

786. Gauntlet of plain steel, fingered.

787. Gauntlet (Late XVIth Century), with border and bands of decoration. The fingers do not belong to the original, and are coarsely made.

788. Gauntlet (XVIth Century), of very small chain mail gloved with leather; the links $\frac{1}{8}$ in. in diameter are jumped, not riveted.

789-790. Left-hand Gauntlets (Middle of XVIth Century), "guanti di pressa" of canvas and leather; the fronts and backs of the hands and fingers covered with small chain mail. Such gloves were used for taking hold of the sharp edge of the adversary's rapier.

791. Leather Gauntlet, lined with chain mail.



CANVAS AND STEEL
GAUNTLET
(III, 792).

792. Canvas Glove, with graduated strips of scales riveted on. Each scale is edged with delicate gilt engraving. The original glove was of leather. This glove is very similar to one shown in Charles V's Inventory. (*Jahrbuch der Kunsthistorischen Sammlungen*, vols. X, XI.)

Purchased in 1839 at Christie's with No. 26.

793. Gauntlet of plain steel, fingered.

794. Gauntlet (XVIth Century), right hand fingered, with long cuff.

795. Gauntlet (Late XVIth Century), right hand, with bands of trophy work engraved and parcel gilt. Brought from Malta in 1826.

796. Gauntlet (Late XVIth Century), with bands of engraving of trophies, etc. The fingers are modern additions. Brought from Malta in 1826.

797. Gauntlet, fingered.

798. Bridle Gauntlet (XVIIth Century), turned upwards as a guard for the elbow. It is decorated with a border of foiled cusps, formerly gilt. The hand-guard is articulated with roped edges, and has holes at the knuckles for attachment of a leather glove.

Weight, 4lb. 8oz.

799-802. Four Long Bridle Gauntlets for left arm, engraved with a pattern of foiled cusps.

803-804. Elbow Gauntlets (Middle of XVIIth Century), for left arm, reaching to the elbow; bright.

1691--1693 (Valuation), *Long Gauntlets* . . . 299 at 14s. each.

805-809. Five Elbow Gauntlets, similar to the above, but blacked.

810. Steel Gauntlet, much damaged.

811. Part of a Gauntlet, of similar date and decoration to No. 775. The fingers are wanting.

812. Part of a Gauntlet (Late XVIth Century), left, consisting of knuckle-plate, engraved with flowers, and two lames.



PORTION OF A
GAUNTLET
(III, 813).

813. Portion of a Gauntlet (Late XVIth Century), right. The cuff is finely embossed and chased with floral designs, and the hand-plates, seven in number, show growing plant forms terminating in lion masks at the knuckles.

814. Cuff of a Bridle Gauntlet (Late XVIth Century), with bands of engraving showing storks, goats, amorini, etc.

815. Cuff of a Gauntlet (Late XVIth Century), decorated with engraved bands of trophy work.

Brought from Malta in 1826.

816. Part of a Gauntlet composed of thirteen lames, joined by sliding rivets with rose-heads. It is extremely flexible, and it is possible to move it in any direction with the greatest ease. The cuff end is turned downwards as though it originally fitted over a rim on the brassard. The fingers are missing.

817-818. Portions of Gauntlets; plain.



GAUNTLET CUFF OF LEATHER.
(III, 821).

819. Part of a Gauntlet (Late XVIth Century). Like other pieces in this class, this is made up partly of genuine and partly of spurious pieces. The knuckles and the hand-plates are delicately etched, but the cuff is a coarse copy of the same design.

820. Leather Glove (Middle of XVIIth Century), fringed with silk.

From the Bryn-y-Pys Collection, 1853.

821. Buff Gauntlet Cuff (XVIIth Century), composed of strips of leather, the edges cut to simulate scales.

Transferred from the Rotunda Museum, Woolwich, *circa* 1862.

822. Buff Gauntlet (XVIIth Century). The cuff composed of scales of thick leather.

From the Bryn-y-Pys Collection in 1853.

Presented by J. Hewitt, Esq., 1862.



III. 92



III. 123



III. 123



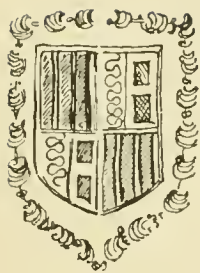
III. 92



III. 92

Armours of King Charles II. and King James II.

Cuissches and Knee Cops.



Nos. 823-824.

823-824. Pair of Cuissards (Early XVth Century), consisting of short cuissches, knee-cops, jambs and sollerets with broad toes. The borders are decorated with a flowing design. The knee-cops and jambs bear a shield of arms within the Collar of St. Michael, with trophies of arms and the letters G.Z. and M.

825-826. Pair of Cuissches and Knee-cops (style of the XVth Century). These are made up of genuine pieces with modern restorations.

827. Top portion of a Cuisshe (XVth Century), left, with diagonal flutings.

828. Cuisshe and Knee-cop (style of XVth Century), made up of genuine and modern plates, with horizontal flutings on the upper lames.

829-830. Pair of Cuissches and Knee-cops (Early XVth Century), with cabled lines and margins.

831. Portion of Cuisshe for right leg, consisting of six lames, fastened with brass rivets.

832. Top portions of Cuissches.

833. Portion of a Cuisshe, with embossed cable and dentated edge.

834-835. Pair of Cuissches (Early XVth Century), fluted and engraved with borders of scrollwork and roped margin similar to those found in No. 51.

836. Cuisshe and Knee-cop (Early XVth Century), fluted, and engraved with triple bands of flowing design. The cuisshe is in two parts, joined by turning-pins.

837. Cuisshe and Knee-cop (right), with roped margins.

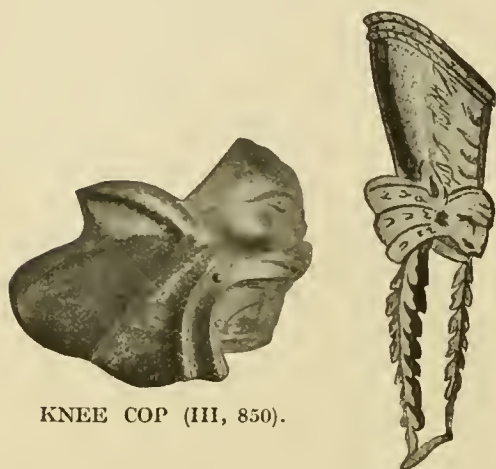
838. Cuisshe and Knee-cops (XVth Century), right, with roped upper margin and fluted fan-plate.

839. Cuisshe and Knee-cop (XVth Century), right, with cabled upper margin.

840. Cuisshe and Knee-cop (right), with roped margins.

841-842. Pair of Cuisshe and Knee-cops, made up of genuine and modern pieces.

843-844. Pair of Cuissards (XVIth Century), black and white.



KNEE COP (III, 850).

From the INVENTORY
OF CHARLES V.
(Real Armeria,
Madrid).

845-846. Pair of Cuisshe and Knee-cops (Late XVIth Century), engraved with bands of trophies of arms. Brought from Malta in 1826.

847. Cuisshe and Knee-cop (left), with roped margins.

848. Cuisshe and Knee-cop (right), with roped margins.

849-850. Pair of Knee-cops (Late XVIth Century), in the form of winged dolphins' heads, gilt and russeted purple. They appear in the *Inventory of Charles V.* Purchased at Christie's in 1839.

Greaves and Sollerets.

851-852. Pair of Greaves and Sollerets (Early XVIth Century), with narrow bands of trophy work engraved and parcel gilt. The sollerets are of the broad-toed variety, ornamented on the top with narrow bands of gilt engraving, terminated by trefoils. Round the lower edge is a series of embossed scallops, engraved with roped margin.

853. Pair of Greaves.

854-855. Pair of Greaves (Late XVI Century). These are for use on horseback, as they do not encircle the leg.

856. Greave (right) not encircling the leg.

857. Greave (Late XVIth Century), engraved with a band of trophies.

Brought from Malta in 1826.

858. Articulated Solleret, with long piked toe and long rowel spur of about 1480, for the right foot. The long-necked spur was necessitated

by the trapper; the total length from the toe to the rowel centre is $23\frac{1}{2}$ in. The heel portion is hinged to the main portion on the outside, and fastened by a pretty turning-pin on the inside, situated above a small guiding-pin which fits into a hole in the front part. The heel consists of a main plate and a smaller one above it; the front portion consists of two plates, the upper one a small one, and then twelve arches, and finally a toe-piece. The rowel is of six points, one of which is broken. The whole solleret has been painted over, and weighs 1lb. 14oz.; parts appear to be genuine, though it has been remade in modern times.

Purchased in 1849.

859-860. Pair of Sollereets (XVIth-XVIIth Century). The heel-pieces wanting.

861. Portion of a Solleret (Late XVIth Century), engraved with musical instruments, weapons, etc.

862-863. Pair of Toe-pieces of rounded shape. These are portions of sollereets, and were not worn separately.



POLDER MITTEN
(III, 864).



MENTONNIÈRE OF THE EARL OF
CUMBERLAND (III, 865).

Reinforcing Pieces, etc., for the Joust.

864. Polder Mitten, or epaule de Monton (XVth-XVIth Century). The lower half of the vambrace and the plate protecting the bend of the arm being fluted. The elbow-cop is of four plates, the central of which is sharply pointed over the elbow, and the front plate has a dentated edge.

865. Mentonnière of George Clifford, Earl of Cumberland (Late XVIth Century), unfinished. The rose, thistle and fleur-de-lys are broadly recessed, but no engraving has been executed. The completed design from the armour appears on Plate XX. of the *Armourers' Album*, Victoria and Albert Museum.

866. Grandguard (XVIth Century).

Weight, 7lb. 4oz.

867. Grandguard and volant-piece.

Weight, 5lb. 12oz.

868. Grandguard and volant-piece.

Weight, 8lb. 12oz.

869. Grandguard (Late XVIth Century), painted russet, with gold stripes set chevron fashion.

Weight, 7lb.

870. Haute-piece (XVIth Century).

Weight, 5lb. 10oz.

871-872. Pasguards (XVIth Century) for the left elbow.

Weight, 3lb. 8oz.

873. Pasguard (XVIth Century).

Weight, 4lb.



SHOULDER SHIELD (III, 874).

874. Shoulder shield (Middle of XVIth Century), ribbed, and finely engraved with foliage, originally parcel gilt.

Weight, 8lb. 4oz.

875. Shoulder shield (XVIth Century).

Weight, 7lb. 8oz.

876. Placate (XVIIth Century), embossed at the upper and lower margins to fit the shoulder fastenings of the cuirass and the taces. It has been engraved with a design, upside down, at a later date. There are two large bolts for fixing.

Weight, 3lb.

877. Lance-rest, hinged with a spring.

878. Lance-rest; fixed.

879. Lance-rest, with very wide flange and screw for adjustment, engraved and parcel gilt.

880. Lance-rest, hinged, and kept in position by a spring.

881. Lance-rest, hinged, with a spring.

882. Lance-rest, of crescent form, hinged.

883. Lance-rest.

884. Lance-rest.

885. Lance-rest, hinged.

886. Lance-rest.

887. Lance-rest.

888. Lance-rest.

889. Lance-rest, from the Maison Dieu, Dover.



VAMPLATE OF SIR CHRISTOPHER
HATTON (III, 890).

890. Vamplate of Sir Christopher Hatton, by Jacobe. The decoration consists of engraved and recessed strapwork with Tudor roses. The whole is gilt. This piece does not belong to the suit of Sir Christopher Hatton now at Windsor; it is part of the suit shown in the *Armourers' Album*, Plate XVII, Victoria and Albert Museum.

891. Vamplate of Henry Prince of Wales, 1612, made by William Pickering. It is engraved and recessed with strapwork, a rose, a fleur-de-lys and a thistle. The workmanship is very similar to that shown on the suits made for George Clifford, Earl of Cumberland, by Jacobe (see No. 865). The rest of this suit is at Windsor Castle.

Transferred to Windsor by Command of His Majesty the King in 1914.

892. Vamplate, plain.

893-894. Large Vamplates (Middle of XVIth Century), of oval form.

895. Large Vamplate, of oval form.

896. Vamplate, studded with brass rivets.

897. Vamplate.

898. Four pieces of metal.



VAMPLATE (III, 894).

CLASS IV: HELMS AND HELMETS.

Helms.¹

TILTING HELM (IV, 1).



GREAT BASCINET (IV, 2).

1. **Tilting Helm (XVth-XVIth Century).**—It is composed of three plates: the skull and back, which have an extra piece riveted on to the lower edge; the reinforcing plate over the brow, attached to the skull by a pivoted hinge; and the face-plate turned over strongly on the upper edge. On the right side is an opening for air, protected from a lance thrust by the metal being bent outwards and not removed. From the condition of the surface it is evident that this piece has been painted and gilded. It bears an armourer's mark, too much worn to decipher.

Weight, 11b. 8oz.

Purchased from the Duke of Buckingham's Collection at Stowe in 1848.

2. **Bascinet for Foot Combats (Early XVIth Century).**—The skull is finely forged in one piece. The visor is so fashioned that it gives the appearance of having an ocularium, but there is no opening on the eye level. There is a series of holes on the left side for sight and for air, and

¹ Some of the Helms formerly included in the Catalogue of the Armouries have been proved to be modern copies or forgeries. These have been placed in Class XXI.

the right side is unpierced. As this type of helm was used only for foot combats the danger of a lance thrust would not be so serious as in the mounted jousts. At the same time, it is peculiar to find openings on the left side and not on the right. The beavor is continued downward in a deep chest-plate, pierced with two large holes to take the bolts on the cuirass. The brass rivets are modern additions. Between the years 1660 and 1827 this was known as "John of Gaunt's Helmet."

Height, 19in. ; depth (front to back), 10½in. Weight, 11lb. 12oz.

1611 (?) *One greate Headpeece remayning of old.*

1660. *Great Hearce of John of Gaunt's one.*

1676, 1683. *Hearse or Large Headpeece of John of Gauntes one.*

1688. (Valuation.) *Hearse or Long Headpeece of John of Gaunts*
£10. 0. 0.

3. **Flat-Topped Helm**, probably a funeral achievement. The ocularium is wide, and the shape is quite unreasonable for practical purposes.

Weight, 17lb.

4. **Tilting Helm** probably used as an achievement in a church. The very open ocularium shows that it can never have been of any practical use. Engraved by Planche in his *Encyclopædia of Costume*, Plate XI.

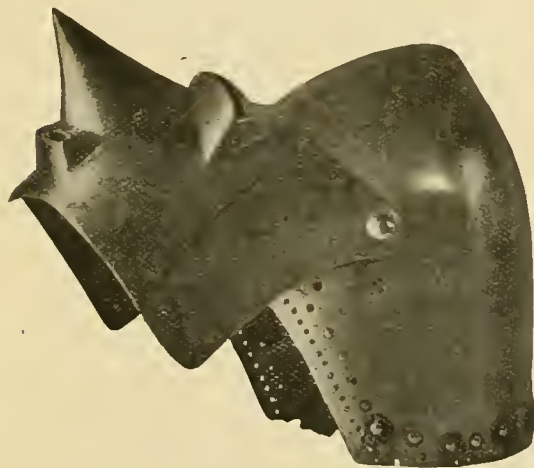
Height, 22½in. Weight, 14lb.

Bascinet and Salades.

5. **Conical Bascinet (XIVth-XVth Century)**, forged in one piece. The crown is slightly ridged, and there are traces of attachment of a camail. The whole is much corroded.

Height, 9in. Weight, 2lb. 4oz.

Purchased in 1852.



BASCINET (IV, 6).

6. **Bascinet (XIVth - XVth Century)**.—The visor is of the "beak" type, and was originally hinged on the brow. It is now pivoted at the sides. From the slope of the line of holes by which the lining or cover was attached it is evident that the lower edge was at one time much deeper, and that at some period it has been cut square.

Weight, 5lb. 4oz.

Purchased at the Brocas Sale in 1834.



SALADE
(IV, 7).



CHAPEL DE FER
(IV, 10).



VENETIAN SALADE
(IV, 17).

7. **Salade (XVth-XVIth Century)**, forged in one piece, with the lower edge turned over. This type of headpiece is evolved directly from the bascinet of the XVth Century. There are armourer's marks, probably of one of the Missaglia family of Milan, repeated three times on the back of the skull. The repetition of the mark is generally considered an indication that the piece was proof against the large cross-bow, the lance and the sword.¹



No. 7.

Weight, 3lb. 4oz.

8. **Salade**, similar to the above, with ridged crest and margin turned over boldly.

Weight, 4lb. 4oz.

9. **Salade (XVth-XVIth Century)**, with splayed margin and strongly ridged crest, bearing an armourer's mark on the back.



No. 9.

Weight, 2lb.

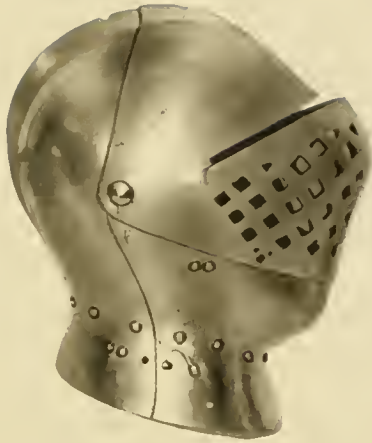
10. **Chapel de Fer (XVth-XVIth Century)**, made in one piece. This type of headpiece is very similar to the pikeman's pot of the seventeenth century.

Weight, 3lb. 2oz.

11. **Visored Salade (German, XVth-XVIth Century)**, much damaged and the visor missing. There is an armourer's stamp on the back much worn.

Weight, 3lb. 6oz.

¹ Ch. Buttin, *Revue Savoisienne*, 1901, fasc. 2, 3, also *The Armourer and his Craft*, 62-64.



II. 6



II. 8



IV. 22



II. 5



II. 7

Helmets of King Henry VIII.



SALADE (IV, 13).

12. Visored Salade (German, XVth-XVIth Century), painted with black and white chequers charged with scarlet trellices, portcullises, etc. The visor is pivoted, and has holes for attaching a lining. This piece has been engraved incorrectly in Hefner's *Trachten des Christlichen Mittelalters*. It had originally belonged to Professor Bahr of Dresden, who purchased it

from the owner of the Castle of Ort in Bavaria.

Length, $17\frac{3}{4}$ in. ; height, $8\frac{1}{2}$ in. Weight, 4lb. 8oz.

Purchased at the Peuker sale, 1858.

13. Visored Salade, similar to No. 12, but unpainted. The visor is pivoted on T-headed rivets, and is retained in its place by a spring catch. The whole surface is hatched over, probably as a groundwork for painting. It retains its original lining and chin-strap. Described in *Archæological Journal*, XXXVII, Page 180.

Weight, 5lb.

Purchased from Baron de Cosson in 1893.

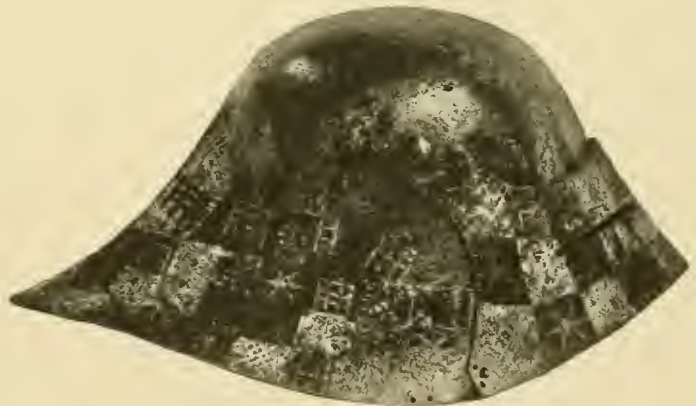
14. Visored Salade, similar to the above. The tail has been cut off and a double visor of modern workmanship has been added.

Weight, 4lb. 8oz.

15. Salade (XVth-XVIth Century), with vision slits pierced in the front.

Weight, 6lbs.

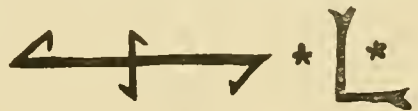
Brought from Rhodes by General J. H. Lefroy, circa 1855.



PAINTED SALADE (IV, 12).

16. Jousting Salade (XVIth Century), forged in one piece, with vision slits pierced in the front. There are two pins, one on each side, for fixing the mentonnière. The tail is edged with a strong band of semi-circular section. The crest is double-ridged, and the crown is fluted. The whole is engraved with the marks shown herewith.

Weight, 7lb. 14oz.



No. 16.



TILTING SALADE (IV, 16).

Weight, 5lb.

17. Venetian Salade (XVth Century), with narrower face-opening edged with an applied strip of metal, the skull bearing the armourer's marks.

In this and in the preceding example the crown is slightly ridged, and the face-opening is T-shaped, based upon the model of the helmet of Ancient Greece.¹ (See page 173.)

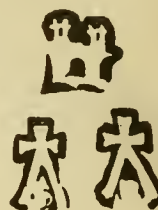


No. 17.

18. Venetian Salade (XVth Century), forged in one piece, with ridged crown and projecting cheek-plates turned over at the edges. Many of the lining holes have been filled up. There is an armourer's mark at the back.

Weight, 4lb. 4oz.

Purchased at the Bernal Sale in 1855.



No. 18.

19. Venetian Salade (XVth Century).—There is a hole in the ridged crest, and the lining holes have been filled up with rivets. It bears the mark of the Missaglia family.

Weight, 5lb. 12oz.



No. 19.

20. Venetian Salade (XVth-XVIth Century), covered with crimson velvet, on which are applied gilt fleurs-de-lys and other ornaments. These appear to have been removed at some time and improperly replaced. It has its original lining of canvas, tow and crimson silk.

Weight, 6lb. 8oz.

Purchased at the Peuker sale in 1858.



VENETIAN SALADE (IV, 20).

¹ Several salades of this type were found in the Castle of Chalcis in 1840; they were part of a store of armour left by the Venetians at the fall of the castle in 1470, and can therefore be dated with certainty (*vide Archaeologia*, Vol. LXII).

Armets and Close Helmets.

21. Armet (Early XVth Century), with projecting visor and roped crest. The edge of the beaver and the lower edge of the helmet are both roped, the latter with very bold cabling. Engraved in Grose's *Military Antiquities*, II, Plates 3 and 6.



ARMET (IV, 23).

Weight, 6lb. 12oz.

22. Mask Helmet, given by the Emperor Maximilian I to Henry VIII (Plate XX). The skull is that of a fine armet, with discs of engraving over the ears. Two large rams' horns of iron, realistically treated, are fixed to the brow. In place of a visor there is a well-forged human mask, with engraving over the eyebrows and on

the cheeks. This does not appear to belong to the skull-piece, and has been cut to fit it. A pair of brass spectacles was riveted on to the cheeks in the seventeenth century. The whole was originally silvered, but during the eighteenth century, possibly earlier, it was painted, the helmet blue, the mask flesh colour and the horns and spectacles yellow and gold. About three years ago the blue paint was removed, and in 1913 the mask was cleaned, exposing the metal and its engraving. The paint on the horns has been left to show the treatment it once received. It is now in, as near as possible, its original condition. Between the years 1660 and 1827 it was attributed in the guide books to Will Somers, jester to Henry VIII. An illustration showing how it was exhibited will be found on page 25.

Weight, 7lb. 8oz.

1547. *A hedde pece wt a Rammes horne silver pcell guilte.*

1561. *Armour sent to your Mtys Father by Maximilian the Emperor garnished with a Head peice of fashion like a Rames head.*

1611. *A Headpeece wt a paire of Rames Hornes.*

1660, 1676, 1683. *Anticke Headpiece with Ramshornes, collar and Spectacles upon it, one Jack, and one sword, all said to be William Sommers' Arms.*

1688. (Valuation.) *Described as above, and valued at £3 0 0.*

23. Armet (Early XVth Century), with one-part visor and reinforcing plate on the brow. There is a neck-plate of one lame.

Weight, 7lb.

24. Armet (Early XVth Century), with ridged crest and reinforcing plate over the brow, boldly scalloped at its edge. The one-part visor drops when closed between the chin-plate and an extra plate which is riveted on to it. A square piece has been cut out of the centre of the chin-piece, a peculiarity only found on English armets. There are two articulated lames at the neck, and the whole has narrow roped edges.

Weight, 6lb. 8oz.



ARMET (IV, 24).



ARMET (IV, 30).

25. Armet, similar to the above, much patched and re-made, with spike fixed on the crest.

Weight, 7lb. 15oz.

Transferred from Dover Castle in 1915.

26. Armet (Early XVth Century), with reinforcing plate over the brow, one-part visor and single neck-lame with roped edge.

Weight, 8lb. 4oz.

27. Armet (Early XVth Century), with bellows visor and roped crest. The beaver is scalloped on the lower edge, and does not belong to the rest. The two neck-lames at the back allow a certain amount of play when throwing back the head.

Weight, 5lb.

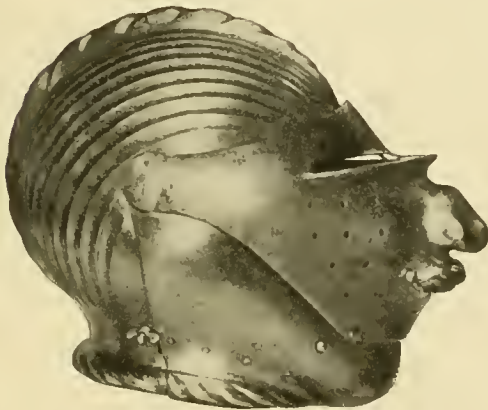
28. Armet (Early XVth Century), with ridged crest and bellows visor. There are two neck-lames in front and behind. The whole is much dented and worn.

Weight, 8lb. 8oz.

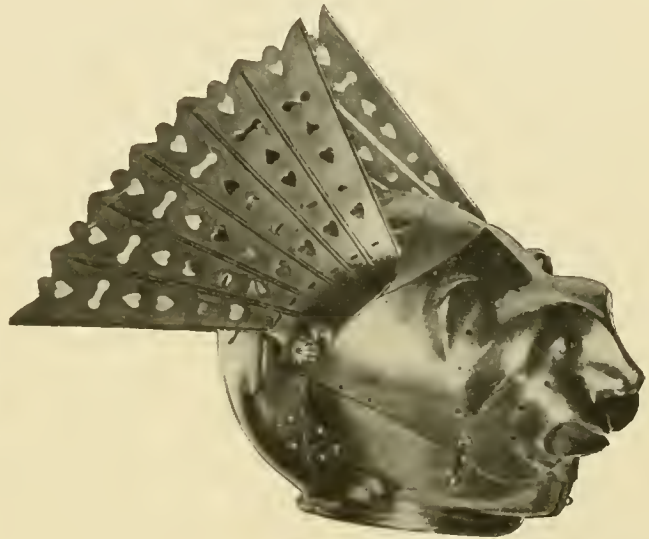
29. **Armet (Early XVth Century).**—The skull is fluted, and has a strong cabled crest. The visor is very skilfully forged in the form of a human mask, with twisted moustaches, horizontal vision-slits taking the place of eyes. Beneath this visor is a modern visor of thin metal. The helmet opens at the side, and has a bold cabled rim to fit over the gorget.

Weight, 8lb. 4oz.

Purchased at the Bernal sale
in 1853.



ARMET (IV, 29).



ARMET (IV, 33).

30. **Armet (Early XVth Century),** with roped crest and two-part visor, the upper portion being pierced with horizontal vision-slits. There are two lames at the back which originally worked on sliding rivets but are now fixed. The helmet is closed by a long plate hinged to the beaver and passing over a turning-pin on the lower part of the skull-piece.

Weight, 5lb.

31. **Armet (XVth Century),** with ridged crest, one-part bellows visor, and articulated lames at the back of the neck. The original lining of quilted yellow silk remains.

Weight, 5lb. 4oz.

32. **Armet (XVth Century),** with roped crest. The visor has horizontal vision-slits. There are two neck-plates in front and two behind, with roped margins.

Weight, 5lb. 8oz.

33. **Armet (XVth Century),** with visor in form of a monster's face, with wings of thin metal at the sides. This piece is probably of Polish origin.

Weight, 5lb. 8oz.

34. Close Helmet (Middle of XVIth Century), with high roped crest and two-part visor, the lower part of which is wanting. There are two neck-lames with roped edges.

Weight, 6lb.

35. Close Helmet (XVIth Century), with cabled crest. The two-part visor has vertical and horizontal slits in the top portion and a rosette of rivets on the lower part. The visor does not belong to the helmet. Engraved in Grose's *Military Antiquities*, II, Plate 4, Nos. 1, 3.

36. Close Helmet (XVIth Century), with roped and fluted crest and one-part visor horizontally fluted. The neck-plates do not belong to the helmet. The turning-pins that close the helmet are peculiar.

Weight, 8lb.

37. Close Helmet (XVIth Century), with bellows visor and ridged crest. There are faint traces of engraving on the neck-plates, and on each side of the skull, at the back, are engraved panels with rampant lions.

Weight, 6lb.



TILTING HELMET (IV, 39).

38. Close Helmet (Late XVIth Century), with high comb roughly etched with a shield of arms and trophies. The visor and reinforcing brow-piece are in one, and are bordered with engraving similar to that found on III. 51, q.v. The former has horizontal vision-slits in the upper part. On the left side of the lower part are circular breathing holes, and on the right side diagonal slits. The visor is bolted to the beaver by a peculiar sliding button.

Weight, 8lb.

39. Tilting Helmet (XVIth Century).—The construction of this piece is peculiar. The ridged skull is of the same type as that of an armet. Pivoted to this is the visor, with narrow ocularium and heavy reinforcing plate, which completely covers the top portion of the skull. The mentonnière is attached by the visor pivots and by turning-pins at the neck, and when

worn was bolted to the breastplate. On the right side of the mentonnière is a spring door about 3in. square.

Weight, 13lb.

40. **Tilting Helmet (Late XVIth Century).**—The skull has a high crest with roped margin, and is engraved with a band of trophies, etc. The visor is in two parts, with horizontal vision-slits in the upper and circular holes on the right side of the lower portions. Neither these nor the beavor belong to the skull-piece.

41. **Tilting Helmet (Late XVIth Century),** with high roped crest and two-part visor. The upper plate of the latter comes far back over the crest, and is pierced with long vision-slits. The lower part of the visor is pierced with slits on the right side and circular holes on the left. There is a strip of metal fixed to the lower part of the visor which, when engaged by a hook on the beavor, keeps the helmet open. There are three neck-lames, made for a wearer with a long neck.

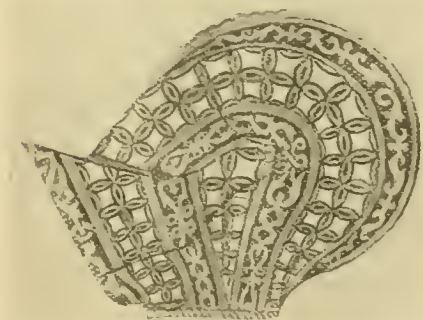
Weight, 9lb. 14oz.

42. **Tilting Helmet** of the same type as No. 41. The upper part of the visor is wanting.

Weight in present condition, 5lb. 12oz.

43. **Tilting Helmet (Late XVIth Century),** made by **Jacobe** for **Sir Henry Lee, K.G., Master of the Armouries** (Plate XXI). The skull is ridged, with a high crest all forged in one piece. The two-part

visor has long vision-slits in the upper portion and circular holes on the right side of the lower part. Both these plates are held together by the F-shaped hook which is found on all close helmets by this maker.¹ The beavor, in two parts, is hinged to the skull on each side, and is joined at the chin by a hook. The helmet is decorated with bands of engraving, gilt on a russeted ground. Between these bands is a series of oval engraved spaces, which, taken together, make lines of crosses. Part of the original lining remains. Of this suit the locking gauntlet is in the possession of the Armourers' and Braziers' Company of



HELMET OF SIR HENRY LEE (IV, 44).

From the *Armourer's Album*, Vict. and Alb. Mus.

London, and the jambs, sollerets, burgonet and buffe are in the Lifruskammer, Stockholm. The suit is figured in the *Armourer's Album* in the Art Library,

¹ Described in the *Armourer and His Craft*, page 55.

Victoria and Albert Museum, and reproduced in the *Almain Armourer's Album*, by Viscount Dillon. There is a portrait of Count Bielka in the Nordeska Museum (*circa* 1670) wearing portions of this suit. The helmet is figured in Grose's *Military Antiquities*, II, Plate 10, and in the *Armourer and His Craft*.

Grose describes it in 1801 as being in the possession of Mr. Rawle, military accoutrement maker in the Strand.

Weight, 8lb.

Purchased at the Bernal sale, 1855.

44. **Tilting Helmet (late XVth Century).**—The skull is made in two parts, joined along the crest. The visor is in two parts, with one long horizontal vision-slit in the upper and several small slits on the left side of the lower portion. On the right side of the lower part of the visor is a door with a spring catch. There is a fork pivoted to the beavor for holding up the visor when open, two neck-lames, and a plume-pipe.

Weight, 9lb.

45. **Helmet (XVth Century),** with roped crest, the visor wanting.

46. **Close Helmet (Late XVth Century),** with ridged crest. The two-part visor has two long vision-slits in the top portion and circular holes on the right side of the lower part. The chin-piece is in two parts, hinged on each side to the skull and joined by a hook in the centre. The visor is closed by an F hook similar to that on No. 44. The plume-pipe is fixed on the left side at the back.

Weight, 6lb. 4oz.



CLOSE HELMET (IV, 47).

47-49. **Three Close Helmets (XVth-XVIIth Century).**—The umbril is fashioned with large semicircular shades over the eyes, and the visor is slit to represent the mouth. The helmet is kept closed by a strap and buckle. Major Angellucci, in his *Catalogo della Reale Armeria, Torino*, states that helmets of this type were taken from the soldiers of Brunalieu and Caffardon, slain in 1602 in an unsuccessful attack on Geneva. Engraved in Sir S. Scott's *History of the British Army*, I, 459.

Weight, 9lb. 8oz.

50. **Close Helmet (Early XVIIth Century).**—The whole is covered with strapwork ornament and panels showing combats, monsters, amorini,



CLOSE HELMET (IV, 50).

etc. The strapwork has been gilt at some period. The metal is very thin and the piece is purely for parade. Engraved in Waring's *Metallic Art*.

Weight, 3lb. 12oz.

Purchased in 1852.

51. Close Helmet (XVIIth Century), with double ridged crest and roped margins. The visor is in two parts, pierced with air-holes on both sides. The vision-slits are so placed that sight can only be obtained when the head is bent forward, as in the charge. There are two neck-lames. The helmet is closed by a hook on the right side and by a spring catch on the chin-piece.

Weight, 7lb. 8oz.

52. Close Helmet (XVIIth Century).—The umbril, visor and beavor are pivoted on a T-headed rivet. The visor has breathing holes on the right side. The whole is kept closed by two hooks.

Weight, 4lb. 8oz.

53. Close Helmet (XVIIth Century), probably used as a funeral achievement, of thin material, painted, and studded with gilt rivets.

Morions and Cabassets.

54. Combed Morion (Late XVIth Century), with very high, ridged crest, and brim turned sharply up in front and behind.

Weight, 2lb. 12oz.

55. Combed Morion (Late XVIth Century), engraved and blacked (Plate XXII). The designs include medallion heads, dancing figures, and military trophies.

Weight, 3lb. 8oz.

56. Morion (Late XVIth Century), coarsely engraved with bands of trophies, etc.

Weight, 2lb. 12oz.

57-58. Peaked Morions, engraved with medallions, trophies, etc.

59. High-combed Morion, engraved with trophies of arms, etc.

Weight, 2lb. 8oz.

Nos. 56-59 were brought from Malta in 1826.

60-82. Twenty-three Peaked Morions (Late XVIth Century), the brims turned up in front and behind.

83-129. Forty-seven Peaked Morions as above, the brims flat.

130. Morion, engraved. (Plate XXII.)

131. Combed Morion.

Weight, 3lb. 8oz.



MORION (IV, 132).

132-134. Three Triple-combed Cabasset-Morions (Late XVIth Century), the combs and edges of the brims roped. The crowns are encircled with brass rivets.

Weight about 2lb. 1 oz. each.

Purchased in 1852.

135. Morion, with recent engraving.

136-141. Six Peaked Morions, roughly engraved.

142. Morion, with strongly turned-back peak. Much damaged.

143. Morion, with dentated brim. The piece is obviously too heavy for wear, and is probably a "dobble," or double, used as a mould or form on which head-pieces were made. Such appliances are mentioned in a list of tools used by John Blewbury, King's Armourer at Greenwich.¹ Modern brass rosettes have been added round the brim.

Weight, 9lb.

144. Cabasset (Late XVIth Century), engraved with figures of Faith, Hope, Charity, Justice, Fortitude and Temperance. The ground-work has been gilt. There are two rows of brass rivets round the brim, a brass plume-pipe and leather lining.

Weight, 3lb.

145-147. Three Cabassets, similar to the above. The engraving, much worn and defaced, shows mounted figures.

¹ See page 49.



IV. 43



II. 84



II. 844



II. 81



II. 83

Helmets by Jacobi. (late XVIth century.)

Casques, Burgonets, and Buffes.

148. Casque (Late XVth Century), with roped crest and pointed fore-peak. The ear-plates are wanting. The crown is edged with a row of rosette-headed rivets.

149. Casque (Late XVth Century) (Plate XXII), embossed on each side with a group of Venus, Mars and Cupid. The margins are etched with borders of flowing design. The crest and edges are roped. Round the base of the skull is a circle of rivets with heads in the form of sun masks. Engraved in Waring's *Metallic Art*.

Weight, 3lb. 8oz.

Purchased in 1852.

150. Casque (Late XVth Century), with high crest and ear-pieces.

151. High-combed Casque, with ear-pieces.

152. Casque (XVth-XVIIth Century), forged in one piece, with hinged ear-pieces. The back part has been cut down.

153. Casque, with brass rosettes round the crown; the ear-pieces wanting. On the back is an armourer's mark.



No. 153.

154. Burgonet (XVth-XVIIth Century) (Plate XXII).—The whole is russeted and finely embossed and chased with fruits, birds and fishes. Over these are applied decorations of gilded metal showing classical warriors, trophies of arms, etc., probably the work of Alessandro Algardi of Bologna. The general feeling of the craftsmanship displayed is not unlike that shown on the suit of King Sebastian of Portugal, made by Anton Peffenhauser (Madrid, A.290).

Weight, 5lb. 4oz.

Purchased in 1826.

155. Burgonet (XVth-XVIIth Century) (Plate XXII), richly embossed with figures of a seated warrior, Fame and Cupid. The crest, brim, nape and ear-pieces are embossed with figures. The same design is repeated on both sides.

Purchased in 1851.

156. Burgonet and Falling Buffe (XVth-XVIIth Century).—The upper lame of the buffe is swelled outwards and pierced with diagonal

slits. The skull and umbril are forged in one piece. The buffe, or beavor, is attached to the ear-flaps by strong hinged loops, closed over a pin by a locking hook. This piece was probably used for siege operations.

Weight: Helmet, 8lb.; Buffe, 4lb.

157. **Falling Beavor**, with strong turnover on the upper edge, and peaked centre. The chin-piece is continued backwards in two wide cheek-pieces, with holes for pivoting to the skull of the helmet.

Weight, 6lb.

158. **Falling Beavor** of three lames, the upper of which is roped at the edge, swelled outwards and perforated with eight slits. It is engraved with trophies of arms, and probably came from Malta in 1826 with many other pieces of similar decoration. The neck-lame is not engraved.

Weight, 14oz.

Open Helmets.

159. **Horseman's Helmet (XVIIth Century)**, with very wide, pointed umbril, pivoted to the skull, and articulated tail-piece. The whole is fluted with lines running from front to back. There are shield-shaped ear-pieces, pierced with holes in the centre.

Weight, 4lb.

160. **Open Helmet (XVIIth Century)**, with umbril and beavor pivoted. In the centre of the umbril is fixed a strong nasal, which reaches down below the chin. Engraved in Grose's *Military Antiquities*, II, Plate 5, No. 1.

Weight, 4lb.

161-163. **Three Open Helmets (XVIIth Century)**, with pivoted umbrils.

Weight, 4lb. 8oz. each.

164. **Helmet (XVIIth Century)**, painted black. The crown has four vertical ridges ending in a pointed apex. It has an umbril pivoted to the skull-piece, a falling beavor of two lames, pierced with circular and horizontal openings, and a large plume-pipe at the back.

Weight, 6lb.

Purchased at Lord Shrewsbury's sale in 1857.

165. **Horseman's Helmet (XVIIth Century)**, the crown embossed with radiating lines, surmounted by a leaf disc and knop. There is a fixed



HORSEMAN'S HELMET (IV, 165).



HELMET (IV, 166).

umbril, with socket and screw for a nasal, which is wanting. There are four neck-lames and ear-pieces, with wheel perforations, mounted on silk ; the whole is russeted and ornamented with gilt brass nails.

Weight, 3lb.

166. **Helmet (Early XVIIth Century)**, probably Polish. The crown is eight-sided, surmounted by an iron knop. The umbril is fixed to the face-plate, which has cruciform bars over the openings. Both are hinged to the brow, and are closed by a spring catch. Engraved in Grose's *Military Antiquities*, II, Plate 4, No. 4, and Sir S. Scott's *History of the British Army*, I, 459.

Weight, 9lb. 14oz.

167. **Open Helmet (Early XVIIth Century)**, with pivoted umbril and beavor. The skull is embossed with radiating lines.

168. **Open-faced Helmet**, with radiating flutings on the skull ; similar to the above.

Weight, 3lb. 8oz.

169. **Horseman's Helmet**, with octagonal skull, terminated in a knop and rosette. The umbril is fixed, and has a socket with nasal and set screw.

170. **Horseman's Helmet (Middle of XVIIth Century)**.—The crown is fluted spirally, and is surmounted by a knop. The umbril is fixed, and has a socket and set screw for a nasal, which is wanting. There are ear-pieces, and a tail of four simulated lames studded with brass rivets.

171-172. Horsemen's Helmets (Middle of XVIIth Century), the crowns slightly fluted, with articulated tail-pieces and fixed umbrils. The nasals and sockets are wanting.

173. Horseman's Helmet, painted black, with fluted skull, fixed umbril, nasal socket and set screw; the nasal wanting. The tail has simulated lames.

174-175. Triple-barred Horsemen's Helmets (Middle of XVIIth Century).—The tails are embossed with simulated lames. The ear-pieces of No. 175 are wanting. Engraved in Grose's *Military Antiquities*, II, Plate 5.

Weight, 8lb. 4oz. each.

176. Triple-barred Horseman's Helmet, with pivoted umbril, ear-pieces and tail, the latter embossed to simulate three lames.

177. Triple-barred Horseman's Helmet, painted black. The vertical bars of the face-guard are crossed by a wavy bar. The tail-piece has simulated lames.

178. Triple-barred Helmet, with ridged crest, ear-pieces, and tail of simulated lames.

179-192. Fourteen Triple-barred Horsemen's Helmets.

193-210. Eighteen Horsemen's Helmets, similar to the above.

On loan to the Maison Dieu, Dover.



"SPIDER" HELMET (IV, 211).

211. Spider Helmet (Middle of XVIIth Century), in the form of a skull cap, with broad umbril. There are nine bars of steel hinged at equal distances round the rim of the helmet. When not required for defence they can be raised and kept in this position by a spring. It retains its original lining.

Weight, 8lb.

Purchased in 1853.

212. Spider Helmet, similar to the above, with its original quilted lining.

Purchased at the Brocas sale in 1834.



IV. 55



IV. 154



IV. 149



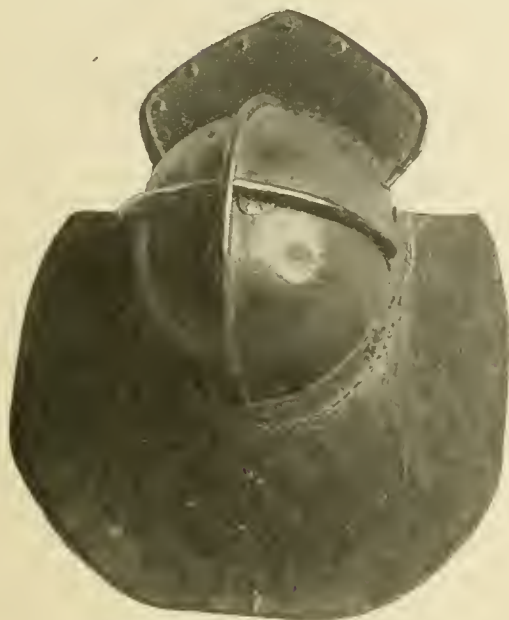
IV. 155



IV. 130

Morions & Burgonets. (XVIth - XVIIth century.)

213-214. Helmets (Middle of XVIIth Century), probably for sappers. The skulls and umbrils are of iron, the former having cruciform ridges. The neck-guards and the linings are of quilted canvas, and the helmets are covered with leather.



SAPPER'S HELMET (IV, 213).

215-247. Thirty-three Pikemen's Pot-helmets (Middle of XVIIth Century); bright. Many of these bear the proof stamps of the Armourer's Company of London. (See II, 110.)

248-268. Twenty-one Pikemen's Pot-helmets, similar to the above.

269-270. Pikemen's Pots, blacked.

271. Pikeman's Pot, painted black, embossed to simulate separate plates, and false rivets.

Weight, 3lb. 4oz.

272. Pikeman's Pot, similar to the above, but bright.



PIKEMAN'S POT (IV, 271).

273-275.—Three Pikemen's Pot-helmets (Middle of XVIIth Century), blacked.

On loan to the Maison Dieu, Dover.



SKULL-CAP (IV, 277).

276. Iron Lining for a felt hat.

277. Iron Skull-cap (Late XVIIth Century), painted black. It is swelled out over the ears, and has a slight peak in front. These defences were probably worn under a felt hat.

Weight, 12½oz.

278. Iron Skull-cap, similar to the above, but bright.

279. Iron Skull-cap, painted black. The sides are slit up so as to fit any sized head. This also was probably used under a hat.

280-291. Twelve Iron Skull-caps (Late XVIIth Century) for wearing under felt hats.

292. Skeleton Skull-cap, or Secrete (Late XVIIth Century).—It consists of a circle of iron, with five branches bent downwards. It was worn under a hat as late as the end of the eighteenth century, as may be seen in the engraving of the Siege of Valenciennes, 1793, by Bromley after Lowtherbourg.

Weight, 5oz.



SECRETE (IV, 292).

293-304. Twelve Skeleton Skull-Caps, similar to the above.



SAPPER'S HELMET (IV, 305).

305-314. Ten Sappers' Helmets (XVIIIth Century), with combs, fixed umbrils, hinged cheek-pieces and neck-guards. These helmets would appear to be most unpractical, as the great weight is borne on the head alone and is not carried by the shoulders.¹

Weight, 13lb. 4oz.

315. Officer's Helmet, Heavy Dragoons, 1828, of bright steel, with applied laurel branch ornament of brass on the skull, Royal arms in brass on front and high crest. The chin-strap is of vandyked

scales, fastened at each side of the helmet by a large brass lion's mask.

316. Officer's Helmet, similar to the above, but wanting the lion's masks.

317-318. Trooper's Helmet, Household Cavalry, 1828, painted black, with brass mounts similar to the above.

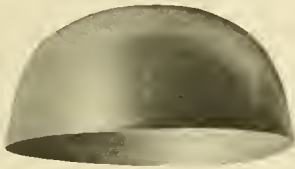
319. Officer's Helmet, Dragoon Guards, 1828, of brass with enrichments of oak leaves on the crest, acanthus scrolls on the skull and in front

¹ A representation of a "flying sap" in the Siege of Rome in 1848, by Raffet, shows helmets of this type in use.

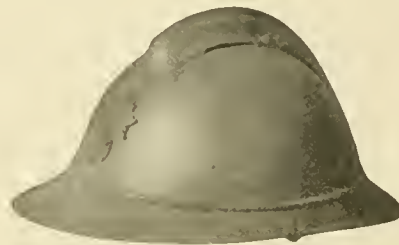
the Royal arms over the words WATERLOO and 1ST OR THE KING'S DRAGOON GUARDS. The chin-strap is of vandyked scales, held in position by two Tudor Roses.

320. Steel Skull-cap (English, Early XXth Century), worn in the trenches in Flanders. It is of precisely similar type to Nos. 278-291.

Presented by the Curator in 1915.



SKULL-CAP (IV, 320).



FRENCH HELMET, 1915 (IV, 321).

321. Trench Helmet (French, Early XXth Century), for artillery, from a design by Edouard D etaille, the military painter, used in the trenches as a defence against shrapnel.

Presented by Sir Lionel Earle, Esq., K.C.B., C.M.G., &c., &c., Secretary of H.M. Office of Works, in 1915.

Portions of Helmets.

322. Part of a Visor of King Henry VIII, with holes on the left side and a door, now fixed, on the right. The margin is engraved and parcel gilt, with designs similar to those found on II, 8-9.

Found in St. James's Palace in 1906, and deposited in the Tower by order of H.M. King Edward VII.

323. Upper Part of a Visor of King Henry VIII, the margins engraved and parcel gilt. The decoration resembles that on the above piece.

Weight, 3lb. 8oz.

324. Chin-piece of a Helmet of King Henry VIII, splayed out to cover the throat. It has holes for pivots on each side, and has the margins engraved with designs similar to the above.

325. Chin-piece of a Falling Beavor of King Henry VIII, the margins engraved with a design similar to that on the above.

326. Mentonni re, engraved with bands of scrollwork and trophies, formerly gilt.

327. Chin-Piece (XVth Century), for use with a salade.
328. Skull-piece of an Armet (Early XVth Century), fluted from front to back, and has three neck-lames articulated.
329. Ridged Skull-piece.
330. Skull-piece of a Helmet.
331. Skull-piece of a Helmet.
332. Lower Lame of Lobster-tailed Helmet.
333. Reinforcing-piece for the Crown of a Helmet (XVth Century), engraved with the Burgundian flint and fire steel, and a border of trophies, musical instruments, etc.
Weight, 18oz.
334. Reinforcing-piece for the Brow of a Helmet.
335. Reinforcing-piece and Ocularium of a Tilting Helmet.
336. Part of a Visor.
337. Face-plate of a Visor.
- 338-339. Chin-pieces of Falling Beavors.
340. Chin-piece of a Falling Beavor, with two neck-lames.
341. Lower Lame of a Falling Beavor, with roped edge and neck-lame.
- 342-343. Parts of a Helmet.

CLASS V : SHIELDS.

1. Pavis of Wood (German, XVth-XVIth Century), Plate XXIII, covered with canvas painted with St. George and the Dragon. Ridged down the centre, with a projecting point at the top. St. George wears a salade, and bears on his shield gules 3 swans argent 2 and 1. The pavis is 4ft. 2in. high by 26in. wide.

Purchased at the Bernal sale in 1855.

2. Pavis of Wood (German, XVth-XVIth Century), similar to the above, painted with a Sun in Splendour, and above it a similar shield of arms.

Height, 45in.

3. Targe of Leather (Spanish, XVIth Century), of heart shape, the painting being almost obliterated. Between the years 1708 and 1825 it was embellished with a crucifix, and was shown as the banner sent to Spain by the Pope on the sailing of the Armada (*vide* Page 31). In form it is very similar to several examples in the Madrid Collection.

Size, 36in. by 30in.

4. Shield of Wood (XVth-XVIth Century), semi-cylindrical in form, covered with leather. Hewitt in his Catalogue of 1859 describes it as being painted with coloured circles, foliage and a crown, but at the present day there is no trace of the decoration. There are eye-slits pierced at the top and a hook to rest a weapon on the right side.

Height, 39in. ; weight, 12lb.

5. Shield of Wood, similar to the above, formerly painted with a rose, a heart, a cross and two arrows, all trace of which has disappeared.

6. Shield of Wood (XVIth Century), covered with canvas painted with label decorations and a shield gules charged with a garbe proper.

Height, 38in.

Purchased in 1841.



(V, 7).

7. Targe of Wood (German, XVIth Century), covered with canvas painted with the arms of Wimpfen; or, an eagle displayed sable bearing a key proper in his beak.

Height, 34in.

8. Targe of Wood (XVIth Century), covered with leather crudely painted with a catherine-wheel, crossed swords, crossed halberds and a heart. The painting appears to be of later date.

Height, 31in.

9. Targe, similar to the above, painted with foliage and rosettes.

Height, 32½in.

Nos. 8 and 9 purchased in 1841.

10. Targe of Wood (German, XVIth Century), covered with canvas painted with a figure of a spearman, surrounded by scrollwork on

a crimson ground. It has a semi-cylindrical ridge down the centre.

Height, 25½in.

11. Targe of Wood, similar to the above, painted with two shields, the one bearing gules, a griffon rampant and the other gules, a tower proper, over all a helmet with a griffon rampant for crest.

12. Targe, similar to the above, but the sinister shield is charged with a decorated label, almost obliterated.

13. Targe of Wood, similar to the above, painted with an armed figure and below a shield bearing gules, three swans argent 2 and 1, the whole on a gilt ground. Round the margin is an inscription, almost obliterated. From the heraldry displayed and the general style of decoration this piece probably belonged to the same individual as Nos. 1 and 2.

Height, 25in.



(V, 10).

14. Targe of Wood, similar to the above, painted with a fesse and a demi-lion in chief.

Height, 28½in.

Purchased at the Bernal sale in 1855.

15. Circular Concave Buckler of Wood (XVIth Century), faced with leather, having an iron umbo, spike and wooden hand-grip.

Diameter, 19½in.

16. Buckler of Wood (XVIth Century), with lantern fixed near the upper edge for night attacks. The inside, painted with scenes from the life of Camillus, has a central arm-pad of velvet and leather straps. The face, of leather, is decorated with gilt tracery.

Diameter, 22in.

Purchased at the Bernal sale in 1855.



LANTERN SHIELD (V, 16).



LANTERN SHIELD (V, 17).

17. Buckler of Wood (XVIth Century), with lantern near the upper edge and steel spike in the centre. The whole is covered with tooled leather, the front being decorated with armed equestrian figures embossed and the back with arabesques.

Diameter, 15in.

Purchased at the Bernal sale in 1855.

18. Buckler of Wood (XVIth Century), covered with leather painted and gilt with arabesques. On the inside is a leather arm-pad and handle.

Diameter, 22in.

19. Buckler of Wood, painted with indecipherable shields of arms.
Diameter, 25in.

20. Buckler, similar to the above, much perished.



BUCKLER (V, 21).

21. Buckler of Wood (Early XVIth Century), concave, faced with concentric circles of brass rivets and umbo of solid steel. This is very similar to the bucklers shown in the painting of the "Embarkation of Henry VIII at Dover," preserved at Windsor Castle. There are similar bucklers in the Musée d'Artillerie, Paris (L. 6), and in the Ashmolean Museum, Oxford.¹

Diameter, 14in.

22. Buckler of Wood (XVIth Century), covered with leather; on the face is a steel boss and sword-breaker.

Purchased at the Bernal Sale in 1855.

Transferred to Windsor by command of His Majesty the King, 1914.

23. Buckler of Steel, with two raised rings to act as a sword-breaker.

24. Gauntlet Shield and sword-breaker of three rings.

25. Buckler of Steel (Middle of XVIth Century), embossed with a cross and thistles.

26-33. Seven Bucklers of Iron (XVIth Century).

Nos. 26, 27 purchased at the Bernal Sale in 1855.

34-42. Nine Pistol-shields (XVIth Century).—These are



BUCKLER (V, 25).

¹ Hewitt, in his Catalogue of 1859, states that this was purchased at the Bernal Sale, and the description and measurement given in Bohn's Catalogue of the Sale (page 252) agree. At the same time it should be noted that it is marked as purchased by Lord Londesborough, from whom it passed to General Pitt Rivers. The example given here is probably part of the original store of Arms and Armour of Henry VIII's time.



PISTOL SHIELDS (V, 43).

circular in form, of wood, faced with steel and painted dull red, brown and black, and have pistols projecting through the centre and small gratings above for sighting. They are lined with cloth. The pistol is breech-loading, with a metal chamber, which is secured by a box-like arrangement, hinged to secure it when loaded. It is discharged by a match fixed in a holder, which is depressed by the hand on to the pan. These are the only existing examples of matchlock pistols. Hentzner mentions such pistols, with four chambers, in his account of the Tower (Page 65 of the present work).

Diameter, 17½ in.

In the Inventory of 1547 there were forty of these targets in store, of which one is described as with "xxti little gonnes" and one "wt iiij gonnes."

1542. *Item a targette of steele wt. a gonne lacking, part of the steele fringed with grene silke and lyned with grene velat.*

1547. *Targettes steiled wt gonnes xxxv.*

1676. Old Targettes of Iron with Pistolls	66
Shield of Wood wth Pistoll	I
Ditto covered wth Leather	I

1683. Old Targettes of Iron wth Pistolls	51
Shields of Wood wth Pistolls	I

1688. (Valuation). *Old Targ^{ts} wth Pistolls 50 at 5 s a pce.*

1691. *Sheilds of wood wth pistolls I at 9 s.*

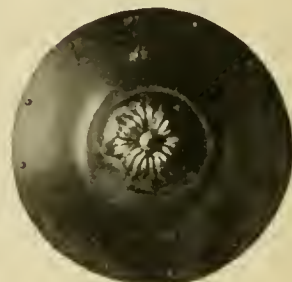
43. Pistol Shield, similar to the above, faced with steel, not painted ; the whole in good condition.



(V, 44).



(V, 47).



(V. 46).

BUCKLERS.

44. Fencing Buckler of Steel (XVIth-XVIIth Century),⁷ with sword-breaker of three rings, hook for suspension and handle on the inside. Diameter, 14in.

45. Buckler of Steel (XVIth-XVIIth Century). Diameter, 13½in.

46. Buckler of Steel, with central spike issuing from a conventional flower. Diameter, 10½in.

47. Buckler of Steel (German, XVIth-XVIIth Century).—The face has a flat margin of 1¼in., and then rises some 2¼in. to a point. This boss, which is six-sided, forms a recess for the hand which grasps a cross-bar riveted to the back of the buckler. Bucklers of this type are shown in works of the sixteenth and seventeenth centuries dealing with fencing.

Diameter, 7in. ; weight, 9oz.

Purchased at the Earl of Shrewsbury's sale in 1857.

48. Target of Iron (XVIth-XVIIth Century), oval, with embossed margin.

49. Target of Iron, similar to the above, with scrollwork coarsely engraved.

50-51. Targets of Iron, similar to the above, but plain. Purchased at the Bernal Sale in 1855.



German Parv. (late 16th century.) V.1.

52. Target of Steel (Late XVth Century), embossed, chased, browned and gilt. The principal subject is the death of Charles the Bold, Duke of Burgundy, at Nancy in 1477. At the top is a figure of Victory, and the borders are richly worked in arabesque designs, masks and fruit.



BUCKLER OF BRASS (V, 53).

53. Buckler of Brass (Late XVth Century), coarsely engraved with a Tudor Rose in the centre and compartments showing the Labours of Hercules, with the inscription: ADVLTERIO DEIANIRA CONSPVRGANS OCCIDITVR CACVS AB HERCVL. OPPRIMATVR 1379. The date has been altered from 1579. In the guide books of the eighteenth century this piece was described as "The Spanish General's Shield (of the Armada) not worn by him but carried as an ensign of honour." The style of engraving suggests that it is of English or Dutch origin.

54-60. Seven Targets of Steel, engraved.

Transferred to Windsor by command of His Majesty King Edward VII in 1901.

61. Target of Steel, engraved with armed figures and arabesques in eight compartments.

62. Target of Steel, engraved with armed mounted figures in six compartments.

Purchased in 1846.

The last two examples are of questionable workmanship. They were, however, exhibited as genuine before the Society of Antiquaries in 1847 by Mr. Porrett, Storekeeper of the Armouries.

63. Target of Steel (XVIth-XVIIth Century), engraved with the arms of Castille and Leon.

Diameter, 22in.

64. Target of Steel (XVIth-XVIIth Century), engraved with radiating bands showing trophies of arms.

Diameter, $21\frac{3}{4}$ in.

Brought from Malta in 1826.

65. Target of Steel, engraved with armed figures ; it has a central spike.

Diameter, 22in.

66. Target of Steel, engraved with figures of halbadiers.



SAPPER'S MANTLET (V, 76).

67. Target of Steel, engraved with radiating bands of decoration ; it has a centre spike.

68. Target of Steel (XVIIth Century), embossed in high relief with combats of classical warriors ; in the centre a lion's mask. It preserves its original lining of velvet and tow.

69-71. Targets of Steel, engraved.

Transferred to Windsor by command of His Majesty King Edward VII in 1901.

72. Small Target of Iron, painted with a parti-coloured star.

73. Target of Steel (XVIth-XVIIth Century).—This is probably a "double" or mould on which shields of this type were made, as its great weight makes it perfectly useless as a portable defence. The centre flower is a more recent addition.

Weight, 41lb. 5oz.

74-75. Iron Mantlets, pierced with numerous bullet holes.

Size, 42in. high by 19in.

76-77. Sappers' Mantlets, made of twelve or more skins of thick leather riveted together ; fitted with back struts and slings.

Size, 50in. by 19in.

78. Shield, with arm-pad, slings, handle and sight grating ; used by the Liverpool police.

Presented by the inventor, R. Gladstone, Esq., in 1913.

CLASS VI: HORSE ARMOUR, FURNITURE AND SPURS.

Bards.

1-5. **Horse Armour of King Henry VIII** (Plate IV).—This Bard is fully described and illustrated under the notice of the engraved suit, II.5.

6-12. **Horse Armour presented to King Henry VIII by Maximilian I** (Plate XXIV).—This suit is generally known as the "Burgundian Bard" from the fact that the decoration consists of Burgundian badges.¹ Like the bard shown with the engraved suit (II.5, VI.1-5), it bears a North Italian mark, and is very similar in the main lines of its construction. It is mentioned in the State Papers of the year 1519 under Revels, as follows: "Item a stele Barde silvered pcell gilte wt. Pomegranates and Burgonyons crosses wt a cryny and a shawfron like guilte wt a payre of Raynes of the same werke wt a fringe of gold and black silke, given by the Emp^{or}."² Its only occurrence in the Inventories is under the date 1547, when it is scheduled with the engraved suit, II.5. The decoration consists of the Burgundian cross raguly, pomegranates and the flint and steel of the Toison d'Or, all engraved and embossed in high relief. The engraving is so similar in technique to that on the engraved bard that it may therefore be surmised that Paul van Vreland produced this bard in Germany, and was brought over to England at a later date to decorate the engraved bard. A curious feature to be noticed is that one of the upper plates of the crupper is only engraved and has not been embossed. The engraving would certainly be executed after the heavy work of embossing had been completed, so that this plate must have been made to take the place of one that was lost or damaged. Like the engraved bard, the work was apparently first silvered and then engraved and, lastly, gilded. There are traces of silver still showing, but all the gilding has been cleaned away.

¹ In a transcript of the Records of the Toison d'Or (Bod. Lib., Ashmole MS., 1116) Henry VII is described as a knight of the Order in 1491, and in 1505, at a chapter held by Philip le Bel on December 27th, 1505, the record under "Chevaliers esleux" runs: "Prince Henry roy Dangleterre Prince de Gaule." This obviously refers to Henry VIII, who was Prince of Wales at this date. It is probable that the bard was sent as a present to him on his marriage, but there are no definite records as to the date of its arrival in the Armouries. Possibly it was sent after the death of Maximilian's first wife, Mary of Burgundy (1482), whose badges it bears.

The Letters and Papers, Henry VIII, § 29, p. 191 *et seq.*

The Bard consists of Chanfron (6), Crinet (7), Peytral (8), Flanchards (9), Crupper (10), Saddle-steels (11) and Reinguards (12). The principal pieces are of the same construction as is found in the engraved bard (1-5), except that in the present instance the crinet is composed of thirteen lames. This piece does not belong to the rest of the bard, for the engraving takes the form of overlapping feathers with no embossing. The hinges on the peytral are in the form of *briquets* or fire-steels. The saddle-steels are decorated in the same manner as the bard, the arçon being of three plates and the cantle of two plates. These are possibly referred to in Letters and Papers, Henry VIII, 29, page 199: "Item a stele Saddell silvered and parcel gylte of the Emperor's gyfte covered with crimson velvet embrawdred wt a brodr of pomegranattes." The reinguards are formed of three oblong plates on each side, fretted with pomegranates and the Burgundian badges. The crupper bears the mark attributed to the Merate Brothers.



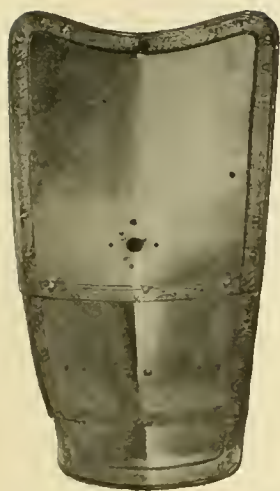
No. 10.

INVENTORY :

1547. *A barde of Stele wt a Burgonion Crosse and the fusye and a Sadell wt a crymyn and a Shaffron to the same.*

„ *A crenet wth skales p'cell graven and guilte.*

13-16. **Horse Armour of King Henry VIII** (Plate VII).—The Bard is white and parcel gilt, with an engraved running border of foliage and dragons. The Chanfron (13) is formed of two plates, the lower of which passes over a pin with a linch-hook in the centre. There are slotted holes at the side, which suggest that extra cheek-plates could be added. The eye and ear-guards are riveted on. On the forehead is a hole for a spike. Hinged to the chanfron is a plate for joining to the crinet, with similar decoration and holes for a plume-pipe. The Peytral (14) formed of three large plates, with narrow lames at the lower edge and a small triangular plate on each side at the inner edges. The main side-plates are beaten out in large bosses, engraved with radiating lines and decorations of trophies, amorini, etc. On the near-side, in front, is engraved a fleur-de-lys, and on the off-side a Tudor rose. This piece is similar in decoration to the chanfron, but the technique is somewhat inferior. The Crupper (15) is in two parts of three wide lames each, joined at the back by two plates; short tail-guard. The whole is decorated with radiating flutings, in which are engraved amorini, trophies, etc., and is bordered with a flowing pattern. On the unfluted parts appear seven-petalled flowers and portcullises. There is a patch of steel, with similar decoration across the back. The engraving is similar to that on the peytral. Grose gives this piece on Plate 25 as part of the armour of Edward III. There is a single Flanchard (16) embossed with radiating flutings, and engraved with foliage, amorini, etc.



PIECE OF HORSE ARMOUR
OF KING HENRY VIII
(VI, 17).

17. Piece of Horse Armour of King Henry VIII, composed of two oblong plates, with borders engraved and parcel gilt. The lower plate is turned slightly outward, and the upper plate has four holes in the centre. This is either a chanfron or the top plate of a crupper, but is not of the usual form of either of these defences.

Removed to Windsor in 1686.

Returned to the Tower by command of His Majesty the King in 1914.

18-20. Horse Armour (North Italian, Late XVIth Century). Consisting of Half-Chanfron (18) with spiral spike in the centre; Peytral (19) of three plates dished sharply outwards with scalloped margins; and Crupper (20) in two parts of four plates each. The whole bard is decorated with incised bands showing medallion heads, birds, military figures, trophies, etc., in the same style as the ornament found on the armours II.44-72.

Brought from Malta in 1826.

Chanfrons.

21. Chanfron (Early XVIth Century), embossed with simulated vertebræ and roped edges. The large rosette on the forehead is modern. Figured by Grose, II, Plate 24. Under the Inventory of 1547 there are 213 chanfrons and sixteen half chanfrons scheduled, and in that of 1676 the number is reduced to 140.

22. Chanfron (Early XVIth Century), with deep cheek-plates, and top plate of crinet hinged to it, and long spiral spike on the forehead.

23. Chanfron (Early XVIth Century), with radiating flutings. The eye-guards are beaten out of the main plate, and the ear-guards are riveted on. There are two large cheek-pieces hinged to the chanfron and a shield and spike on the forehead.

24. Chanfron (Early XVIth Century). Plate XXV.—Of large size, much restored. The front is boldly embossed to simulate vertebræ with radiating flutings. The eye-guards are large, and are fluted in a different manner. These and the ear-guards are riveted on. The lower edge has a heavy roped border.



TOP PLATE OF CHANFRON
(VI, 25).

25. Top Plate of a Chanfron for joining to the Crinet (Middle of XVIth Century).—The decoration consists of a medallion, surrounded by a frame of strapwork, in which is embossed and engraved a figure of Judith with the head of Holofernes. The technique is extremely fine, and appears to be French.

26. Chanfron (Middle of XVIth Century) of three plates, with ear-guards riveted on. The eye-guards are missing. The front and the ears are embossed with radiating flutings, and has a modern rosette on the forehead.

27. Chanfron (Middle of XVIth Century) of two plates, with roped edges. The eye and ear-guards are riveted on. There is a brass plume-pipe on the forehead, which is a more recent addition.

28. Chanfron of large size (Middle of XVIth Century).—The eye-guards are beaten out, and the ear-guards and two large cheek-plates are riveted on. There is a rosette and long spiral spike on the forehead.

29. Chanfron (Middle of XVIth Century), with lines embossed chevron fashion.

30. Chanfron (Middle of XVIth Century). Plate I—With embossed lines set chevron fashion.

31. Chanfron (Middle of XVIth Century), with radiating flutings, and shield on the forehead.

32. Chanfron (Middle of XVIth Century) of large size, with slightly roped edge.

33. Chanfron (Middle of XVIth Century). Plate XXV—With eye-guards beaten out and ear-guards riveted on. It is decorated with bands of engraved laurel and palm leaves gilt. The top plate of the crinet, decorated in a similar fashion, is hinged to the chanfron.

1691-1693 (Valuation) *Shanfron richly gilt* 1 at £3 0 0

34. Chanfron (Middle of XVIth Century), fluted, with large eye and ear-guards; the rosette on the forehead is a later addition.

The chanfron is hinged to the crinet (65), which is part of the same bard. Figured by Grose, II, Plate 24.

35. **Chanfron (Middle of XVth Century).** Plate II—Of four plates, the lowest of which is beak-like and curved inwards. There are radiating flutings on the front and also on the ear-guards. In the centre is a rosette and spike. The chanfron is joined to the crinet (66) with linch-pins. The whole is edged with a roped border. Figured by Grose, II, Plate 24.

36. **Chanfron (XVth Century).** Plate XI—Formed of a single plate, the eye and ear-guards being beaten out and not, as in most examples, riveted on. The lower margin is bordered with a roped edging. The rosette and spike on the forehead are modern.

37. **Chanfron (XVth Century),** with top plate of the crinet hinged to it.

38-47. **Ten Chanfrons ; plain.** No. 46 is figured by Grose, II, Plate 24.

48. **Chanfron, painted black.**



49. **Chanfron of Robert Dudley, Earl of Leicester (1532-1588), by Jacobe.** Plate XXV—It is formed of one plate, from which the eye-guards are beaten, the ear-guards being riveted on. The decoration consists of bands of trophy work, and the Ragged Staff, charged with the crescent of cadency, all recessed and engraved. Originally it was probably russeted and gilt. On the forehead is a medallion embossed with the Bear and Ragged Staff, surrounded by the Garter. A spiral spike fixed in the centre appears to have been a later addition, as it breaks into the figure of the bear. The decoration is not that shown in the *Almain Armourer's Album*, Plate VI, but it is obviously by the same hand. It forms part of the armour II.81. Figured by Grose, II, 24.

Drawing from *The Armourer's Album*
 Vict. & Albt. Museum. Plate VIII.

50. **Half Chanfron of William Somerset, third Earl of Worcester (1526-1589), by Jacobe.** Plate XXV—The decoration consists of wavy lines, engraved and gilt. The ear-guards are riveted on, and the eye-guards are beaten out of the main plate. In the front is a shield, with a plume-pipe decorated in the same manner as the chanfron. This piece is part of the suit II.83.

It is figured in the *Almain Armourer's Album*, Plate XIV, where the original russet colour is shown, and also by Grose, II, Plate 24.

51. Half Chanfron of Sir John Smythe (1534-1607), decorated with bands of incised work, sanguine and parcel gilt; similar to that found on the armour II.84.

Removed to Windsor 1686.

Returned to the Tower by command of His Majesty the King in 1914.

52. Chanfron of George Clifford, third Earl of Cumberland (1558-1605). Plate XXV—It is formed of one plate, from which the eye-guards are beaten out. The ear-guards are riveted on. The groundwork is hatched and blued with bands of gilt engraved and embossed work, each band ending in a star. In the centre is a spiral spike. This piece forms part of a suit, of which portions remain in the Armoury (II.85).

53. Half Chanfron (Late XVIth Century), with brass plume-pipe.

54. Chanfron (Late XVIth Century) in two plates, joined with linched pins. There are no eye-guards, and the ear-guards are riveted on. It is fluted with radiating lines, and is bordered with white metal rose-headed rivets.

55. Chanfron (Late XVIth Century). Plate XXV—With eye and ear guards riveted on. It is engraved with vertical bands of decoration showing torches, vases, etc., with alternate bands of gilding. The rosette on the forehead is fashioned in radiating lines, engraved with masks, etc. A plate is hinged to the upper edge for joining to the crinet.

1691-1693. (Valuation) *Shanfron sangd. and partly damasked . . . 1 at 15s.*

56. Half Chanfron (Late XVIth Century), black and white, with ear-guards riveted on. It is decorated with brass rose-headed rivets, and has a shield with a spike in the centre. It forms part of the same bard as the crinet (67).

57. Chanfron (Late XVIth Century) of one plate, with eye and ear-guards beaten out. The whole is painted brown, with gold stripes chevron fashion.

58. Chanfron (Late XVIth Century); plain.

59. Chanfron of King Charles I when Prince; decorated with vertical bands of engraved scrollwork, gilt. The top plate of the crinet is hinged



Horse Armour of King Henry VIII., VI. 6-12.

to it. This piece is part of the suit II.90, VI.117, 118, and is probably the work of Petit of Blois¹.

60. **Chanfron of Charles I (French)**, engraved and gilt. Plate XVIII—The cheek-pieces and the top plate of the crinet are hinged on, and there is a rosette and spike on the forehead. This piece is part of the suit II.91, VI.112.

Weight, 4lb. 6oz.

1683. *Two gilt shaffrons whereof one is said to belong to King Charles the First's horse.* (See also Inventories under II.91.)

Crinets.

61. **Crinet (XVth-XVIth Century)**, in three parts each, composed of strips of metal embossed in overlapping scales and pieces of mail. On one of the plates are two lead seals showing a shield of many quarterings, surmounted by seven crested helms. From the style of the heraldry the piece appears to be German.

? 1547. *Itm Crenetts of lether with cheynes of iron V.*

62. **Top Plate of Crinet (Middle of XVIth Century)** for joining a chanfron with fine bands of engraving, brass-edged eyelet-holes for laces and narrow roped edge.

63-64. **Top Plates of a Crinet** for joining a chanfron.

65. **Crinet.** Plate I—Of eleven lames, with horizontal flutings. A narrow lame in front is hinged to the chanfron (34), which is part of the same bard.

66. **Crinet** of twelve lames, joined to the chanfron (No. 35).

67. **Crinet** of black and white, of eleven lames, each lame being fretted out with an oblong opening, pointed at one end. This piece is part of the same bard as the chanfron (56).

68. **Crinet** of nine lames, joined with sliding rivets.

69. **Crinet** of eight wide lames, embossed along the nape to simulate vertebræ, and engraved with scale decoration and flowing border.

70. **Crinet** of eleven lames, with radiating flutings on the upper part, and roped edges.

¹ Figured in colour in Starkie Gardner's *Foreign Armour in England*, 1898.

71. **Crinet** of ten lames, working on sliding rivets, embossed to simulate vertebræ.

72. **Portion of Crinet** of four wide lames, embossed with simulated vertebræ and slashings.

Peytrals.

73. **Peytral (Early XVth Century)** of three main plates, with large bossoirs, on which are embossed grotesque horned heads, hearts and arrow-head lines. The whole is bordered by three narrow plates, riveted on, and turned over in a large cable edging.

74. **Peytral (Middle of XVth Century)**. Plate XII—Of six plates, with large bossoirs. There are several holes, in pairs, all over the bard, which were either for attaching lining, covering or metal ornaments.

75. **Peytral (Middle of XVth Century)** of six plates, much restored, with large bossoirs and vertical flutings. The margin is turned over in a bold cable edging.

76. **Peytral (Middle of XVth Century)** of three plates, dished sharply out with scalloped edges and embossed with vertical lines. The plates are joined with large T-headed rivets, and the holes for attaching the lining are edged with brass.

77. **Peytral (Middle of XVth Century)**. Plate I—Of three plates, with shallow, horizontal flutings and engraved lines. The margin is dentated.

78. **Peytral (Middle of XVth Century)**. Plate XI—Of three plates, sharply dished outwards.

79. **Peytral (Middle of XVth Century)**. Plate II—Of six plates, joined with large T-headed rivets. The lower margin is dished sharply outwards with scalloped edge. There are vertical bands of embossing. This piece is shown as part of the armour of Edward III, by Grose, II, 25.

80. **Oval Plate (XVth-XVth Century)**.—The surface is fluted horizontally, and is bordered with a row of holes for attaching the lining. This has been described as a knee-guard for jousting (*streiftartschen*), but it is more probably intended to be applied to a horse-trapper of fabric, as the piece is quite flat and is not hollowed to fit the knee.

81. **Oval Plate**, similar to the above, with radiating flutings.

Cruppers and Flanchards.

82. **Crupper (Early XVth Century).** Plate XII—Of two parts, each part of three plates. The upper plates are bossed out in large swellings over the haunches. The two portions are joined, one large and one narrow plate, at the back. The tail-guard is of the ordinary type.

83. **Crupper (Early XVth Century)** made up of several plates, about 7in. square, riveted together. The tail-guard is embossed to simulate vertebræ.

84. **Crupper (Early XVth Century).** Plate I.—In two parts, each of five horizontal lames, with shallow vertical flutings. The two portions are joined at the back by a piece of four lames. The lower margin of the whole piece is roped. The tail-guard is long, reaching to the cantle of the saddle, and is embossed with diagonal flutings; it does not appear to belong to the crupper.

85. **Portions of a Crupper (Early XVth Century),** with vertical flutings and simulated slashings, and large cabled edge. The treatment of the surfaces resembles that found on the design from the armour of the Duke of Norfolk in the *Armourer's Album*, but the main lines of the piece suggest an earlier date.

86. **Crupper (Middle of XVth Century).** Plate II—Of twelve plates, with tail-guard, the margins scalloped; part of the same bard as the peytral (79).

87. **Portion of a Crupper of Cuir-bouilli (Middle of XVth Century).**—This material is very rare in collections at the present day. The Royal Armoury at Turin possesses a peytral and crupper of this material (B.2), and the Zeughaus at Berlin has a morion (6ob.) of the same material. These bards of leather were painted and gilt with brilliant decorations, generally of a heraldic nature.

1561. *Lether barbes* LXVI.

1611, 1629. *Barbe of Leather* . . I.

88–89. Pair of Flanchards.

90–91. **Pair of Flanchards,** each formed of eight small plates, riveted together. They belong to the same bard as Nos. 76, 83.

92. Flanchard.

93. **Flanchard** of small size, with embossed lines and roped edging.

Saddles and Saddle-Steels.



SADDLE FOR THE JOUST (VI, 94).

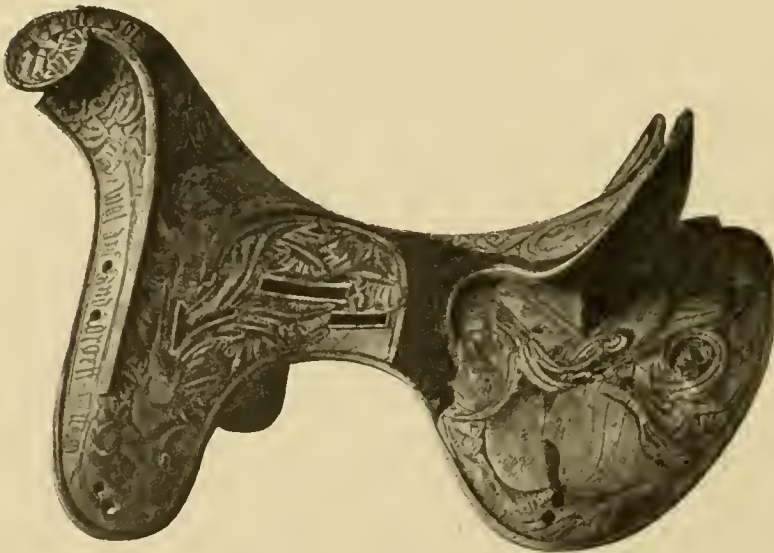
94. Large Wooden Saddle for the Hohen Zug (XVth-XVith Century).—The object in this form of joust was to break the lance and not, as was the case in other varieties, to unhorse the opponent. The rider was kept firmly in his place by iron rings, which encircled his thighs. The whole is covered with leather, which was formerly painted.

Height, 3ft. 11in.

Described in *Archæological Journal*, XV, 37.

Purchased at Baron Peuker's sale in Berlin, 1858.

95. Saddle (German, End of XVth Century).—The framework of the saddle is overlaid with plaques of bone carved with dragons, foliage, etc., with hatched and coloured ground. An inscription on scrolls round the border runs thus: ICH HOFF DES PESTEN DIR GELING. HILF GOT WOL AUF SAND IORGEN NAM ("I hope the best fortune may attend you. May God assist you in the name of St. George"). The point of the arçon shows St. George's cross in red.



SADDLE OVERLAID WITH IVORY (VI, 95).

96-97. Pair of Saddle-steels of King Henry VIII. — The arçon is formed of two plates and the cantle of four plates, the latter being boldly ridged. Both are decorated with flowing designs, and borders engraved and gilt, similar to that on the armour II.8.

98-99. Pair of Saddle-steels of King Henry VIII, white and parcel gilt, decorated with bands of engraving in flowing design. The arçon

consists of three plates and the cantle of four plates. These pieces are very similar to the above.

Pair of Saddle-steels of King Henry VIII, similar to the above.

100-101. **Pair of Saddle-steels (Early XVth Century).** Plate I—The arçon is of four plates, the cantle of one plate, both with radiating flutings and roped edges.

102-103. **Pair of Saddle-steels (Early XVth Century).**—The arçon is of three plates, the cantle of one plate, both decorated with radiating flutings and roped edges.

104-105. **Pair of Saddle-steels (Early XVth Century),** embossed with radiating flutings and roped edges. The arçon is of three plates and the cantle of three plates, one of which is missing.

106-107. **Two Saddle-steels (Early XVth Century);** not a pair. The arçon is formed of three plain plates and the cantle of one plate, with radiating embossed lines and roped edging.

108-109. **Pair of Saddle-steels (Early XVth Century).**—The arçon and cantle are of three plates each, one of the latter missing. Both are decorated with radiating flutings and roped edges.

110. **Saddle-steel (Middle of XVth Century),** cantle only, of two plates, gilt and engraved all over with combats of warriors in classical armour in a border of hares, dogs, etc.; roped edges.

1611. *S. P. Dom. Jac. I, LXIV, 73.*

Steles for Sables viz one guilte and graven one other parcell guilte and one other of Cuttwoorke guilte, in all III.



SADDLE-STEEL (VI, 111).

111. **Portion of a Saddle-steel (Middle of XVth Century),** cantle only, decorated with fretted designs of flowers and dragons.

1547. *A tree of a Saddell coverd with stele plate cutte owte with braunches graven and guilte.*

1611. (*See extract under No. 110.*)

112-113. **Pair of Saddle-steels (Middle of XVth Century).**—The arçon is in three plates, the cantle in two plates. Both are decorated

with bands of interlaced strapwork and trophies, engraved and parcel gilt, with roped edges.

114. Saddle-steel (Late XVth Century), cantle only, gilt and engraved with vertical bands of acanthus, and roped edge.

115. Saddle-steel of Sir John Smythe, by Jacobe, cantle, in one piece, finely engraved and gilt, with bands of incised work showing Fortitude, Fortune and Justice; the whole was originally sanguine and gilt.



SADDLE-STEEL OF SIR JOHN SMYTHE (VI, 116).

It forms part of the suit II.85. It is not figured in the *Armourer's Album*, but is certainly part of the equipment shown on Plate XXVII.

116. Saddle-steel of Sir John Smythe, arçon of three plates, decorated with vertical bands of incised work matching the above.

Removed to Windsor in 1686.

Returned to the Tower by command of His Majesty the King in 1914.

117-118. Pair of Saddle-steels of King Charles I when Prince.—The arçon is of three plates, the cantle of one plate. Both are decorated with vertical bands of engraved scrollwork, gilt. These pieces form part of the suit II.90, VI.59, and were probably made by Petit of Blois.

119-120. Pair of Saddle-steels of Charles I. Plate XVIII.—The arçon is of three plates, the cantle of one plate. The former has D-rings at either side for attaching holsters. Both are engraved with scrollwork and gilt. These pieces are part of the suit II.91, VI.60.

121-122. Pair of Saddle-steels (Late XVth Century).—The arçon is of three plates, one of which is missing, and the cantle of two plates. Both are decorated with bands of engraved arabesques, and have roped edges.

123-124. Pair of Saddle-steels, with roped edges. The arçon is of three plates and the cantle of one plate.

125. Saddle-steel, arçon only, of two plates.

126. Part of a Saddle-steel.

127. Saddle-steel.

Stirrups.

128. Iron Stirrup (XIth or XIIth Century), damascened with gold; said to have been found in the Thames. Similar examples are in the Ashmolean Museum, Oxford.



STIRRUP (VI, 130).

129. Iron Stirrup (XIIIth-XIVth Century), much rusted, with loop for the leather in front and branches projecting below the tread.

130. Large Steel Stirrup (Middle of XVth Century) with funnel-shaped branches of flat steel, pierced with pear-shaped designs. The tread shows a quatrefoil. This shape was devised for use with the pointed *solleret à la poulaine*.

131-132. Pair of Steel Box-stirrups (XVIth Century), with large flanges of plain steel on the outside to protect the wearer's ankle.

133-134. Pair of Steel Half-box Stirrups (Early XVIth Century), covering the toe of the wearer completely.



STIRRUP OF
KING HENRY VIII (VI, 135).

135-136. Pair of Steel Stirrups of King Henry VIII with very wide branches and grated treads, engraved with the Tudor rose and portcullis.

137-138. Pair of Steel Stirrups (Middle of XVIth Century). Plate I—With wide branches and oval grated treads, decorated with vertical flutings.

139-140. Pair of Steel Stirrups (Middle of XVIth Century), with wide branches and grated treads.

141. Small Steel Stirrup (Middle of XVIth Century).—The branches are almost circular, with roped edges, and small, square, grated tread.

142-143. Pair of Steel Stirrups (Late XVIth Century), ornamented with fine cut-work and fleurs-de-lys on the top, roped edges and grated treads.



(VI, 142).



(VI, 141).



(VI, 169).



(VI, 155).

STIRRUPS.

144. Small Steel Stirrup (XVIth Century), with engraved branches, swivel ring and oval grated tread.

145-146. Pair of Steel Stirrups (XVIth Century), with vertical flutings and grated treads.

147. Pair of Steel Stirrups (XVIth Century), with wide, grated treads.

148. Pair of Steel Stirrups (XVIth Century), with vertical flutings and grated treads.

149-150. Pair of Steel Stirrups (XVIth Century), with shells, engraved dot-work and grated treads.

151-152. Pair of Brass Stirrups (XVIth-XVIIth Century), with shells, vertical flutings and grated treads.

153-154. Pair of Steel Stirrups of King Charles I. Plate XVIII—Engraved and gilt. They are shown with the suit II.91, VI.60, 119, 120, but are of finer and earlier workmanship.

155. Cast Bronze Stirrup (XVIIth Century), formerly gilt. The decoration consists of cupids carrying lamps, fleurs-de-lys, etc., in high relief; large, square, pierced tread.

156-157. Pair of Brass Stirrups (XVIIth Century), with grated treads.

158-159. Pair of Brass Stirrups (XVIIth Century).

160-161. Pair of Brass Stirrups (XVIIth Century).



VI.50



VI.24



VI.52



VI.53



VI.55



VI.49

Chanfrons.

162-163. Pair of small Brass Stirrups (XVIIth Century), with twisted branches, ending in acorns and grated treads. The rings for the leathers are set at right angles to the branches.

164. Brass Stirrup (XVIIth Century), with grated tread.

165-166. Pair of Brass Stirrups (XVIIth Century), with grated treads.

167-168. Pair of Brass Stirrups, with open treads.

169-170. Pair of Brass Stirrups (End of XVIIth Century), with shell ornaments and open treads.

171-172. Pair of Brass Stirrups (XVIIth Century).

173-174. Pair of Brass Stirrups (XVIIth Century).

175-176. Pair of Brass Stirrups (XVIIth Century).

177-178. Pair of Steel Stirrups (XVIIth-XVIIIth Century), with swivel rings and grated treads.

179-180. Pair of Brass Stirrups (XVIIIth Century), almost circular in form, with grated treads.

181-182. Pair of Steel Stirrups (XVIIIth Century), almost circular in form, with small treads.

183-184. Pair of Steel Stirrups.

185-186. Pair of Steel Stirrups.

187-188. Pair of Steel Stirrups, with oval grated treads, and lozenge-shaped plaque in front of the ring.

189-190. Pair of Steel Stirrups.

191-192. Pair of Steel Stirrups, with oval grated treads.

193. Iron Stirrup, with swivel ring and small grated tread.

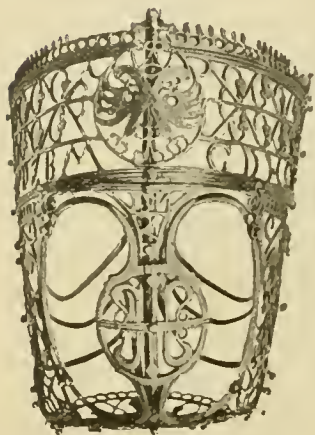
194-195. Pair of Large Wooden Stirrups (Spanish, XVIIth or XVIIIth Century).—They are painted white, and decorated with garlands, ribbons, etc., in applied brass.

196. Small Iron Stirrup, much rusted.

197. Copper Mexican Stirrup, with swivel ring and square, open tread.

198. Copper Mexican Stirrup, with large ring, and grated tread pierced with four hearts.

Muzzle and Bits.



HORSE-MUZZLE (VI, 199).

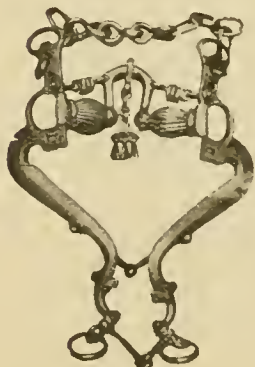
199. Steel Horse-muzzle (German, Late XVIth Century).—It is formed of fine openwork, which shows a fleur-de-lys and a two-headed eagle. An inscription runs along the top, which, as is often the case with such objects, is indecipherable : I.W.D.Z.B.M.G.D.H.C.C. and below 1567 R.

200. Bit of King Henry VIII, with cheeks, 10½ in. long, engraved and parcel gilt. The decoration is similar to that on the horse armour, 13-17. This type is called *Escache à la Pigniatelle*.

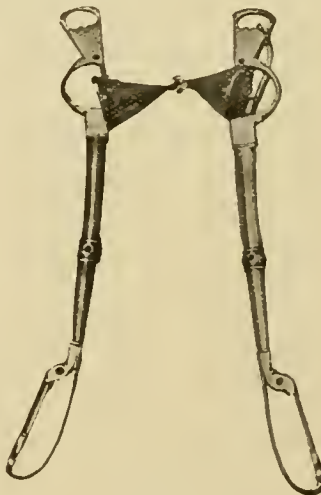
201. Bit (XVIth Century), with double conical snaffle, cheeks 9 in. long, parcel gilt, and fine copper-gilt bosses in the form of pineapples.

? 1547. *Itm. one Bitte of Counterphet Damaskene woorke wt. Bosses.*

202. Bit (XVIth Century), with snaffle covered with close-set rings, swan-necked cheeks 11 in. long, and brass bosses decorated with arabesques. These seem to have been cast from filigree work.

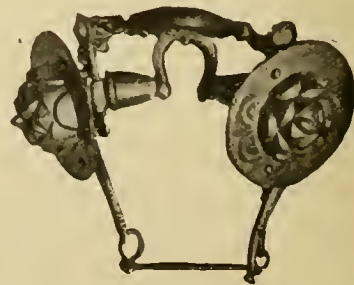


(VI, 200).



(VI, 211).

BITS.



(VI, 201).

203. Bit, similar to the above, with engraved cheeks $13\frac{1}{2}$ in. long, and brass bosses.

204. Bit (XVIth Century), with double conical snaffle, cheeks 13in. long, and modern brass bosses.

205. Bit (XVIth Century), with 12in. cheeks, and brass bosses showing the banner and badge of the Earls of Chester.

206. Bit (XVIth Century), with 9in. cheeks, and small brass bosses. The headstall is decorated with gilt plaques, buckles, etc., set with cornelians of seventeenth century workmanship.

207. Bit (XVIth Century), with snaffle covered with closely set rings, cheeks 12in. long, and modern brass bosses.

208. Bit (XVIth Century), with double conical snaffle, cheeks $11\frac{3}{4}$ in. long, and brass bosses of pierced work.

209. Bit (XVIth Century), with double conical snaffle, cheeks $11\frac{1}{2}$ in. long, and small brass bosses.

210. Bit (XVIth Century), with double conical snaffle, cheeks $9\frac{1}{2}$ in. long, and brass bosses decorated as No. 202.

211. Bit (XVIth Century), with double conical snaffle and cheeks 17in. long.

212. Bit (XVIth Century), with double conical snaffle, cheeks 13in. long, and small brass bosses.

213. Bit (XVIth Century), with cheeks $10\frac{1}{2}$ in. long, and brass bosses bearing the Bavarian arms.

214. Bit (XVIth Century), with cheeks 11in. long, and small brass bosses.

215. Bit, similar to the above, with $12\frac{1}{2}$ in. cheeks.

216. Bit, similar to the above, with 13in. cheeks.

217. Bit, similar to the above, with $11\frac{1}{2}$ in. cheeks.

218. Bit, similar to the above, with 13in. cheeks, and brass bosses of pierced work.

219. **Bit**, similar to the above, with 13in. cheeks, and brass bosses.

220. **Bit**, similar to the above, with 12in. S-shaped cheeks, and brass bosses. The headstall with this bit has a brass ball and star and crescent hanging from it. This is the last remains of the "Turkey bridles" which were on all the figures from 1700-1827.

221. **Bit**, similar to the above, with 8in. cheeks, copper-gilt bosses and buckles; ornaments and strap-ends on the headstall of gilt brass of seventeenth century workmanship.

222. **Bit**, similar to the above, with 11in. cheeks, and brass bosses bearing the crown and W.R. (William III). The headstall bears the same cypher.

223. **Bit**, similar to the above, with 11½in. cheeks, and brass bosses.

224. **Bit**, similar to the above, with brass bosses.

225. **Bit (XVIth Century)**, with double conical snaffle, cheeks 13½in. long, and brass bosses.

226. **Bit (XVIth Century)**, with double conical snaffle, 11in. cheeks, and brass bosses.

227. **Bit (XVIth Century)**, with double conical snaffle, and cheeks 18½in. long. This type is called *Canon à la Pigniatelle*.

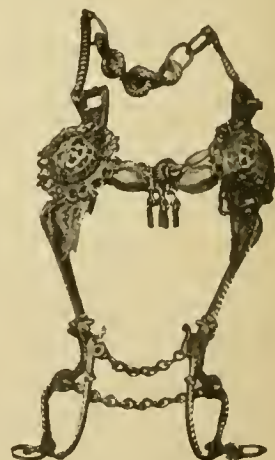
228. **Bit (Late XVIth Century)**, with double conical snaffle, and cheeks, 10in. long, finely cut and decorated with thistles of steel.



(VI, 228).



(VI, 232).



(VI, 229).

BITS.

229. Bit (Late XVIth Century), with finely cut cheeks 13½ in. long, and pierced steel bosses. The curbs are formed of links of twisted cable of steel.

230. Bit (XVIth-XVIIth Century), with jaw-ring, and 11 in. cheeks.

231. Small Bit (XVIIth-XVIIIth Century), with jaw-ring, and short pierced and engraved cheeks.

232. Bit (XVIIth-XVIIIth Century), with jaw-ring, and small jangles on the bar. This type is called *Mors à la turque*.

233. Small Bit, similar to the above, with jaw-ring and engraved cheeks.

234. Bit.

235. Bit, with jaw-ring, and bar pierced and engraved.

236. Snaffle Bit, with brass rings ; found in Ireland.

237. Snaffle, with brass rings ; found in County Leitrim, Ireland.

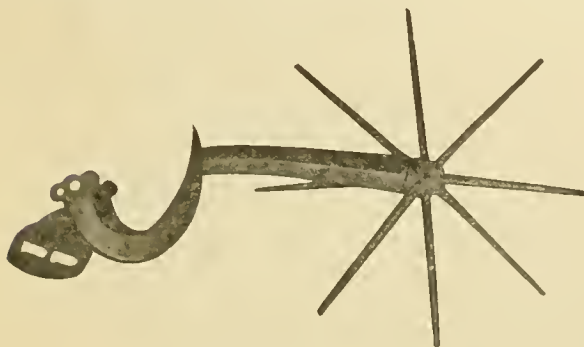
Spurs.

238-239. Prick Spurs (XIth-XIIth Century).

240. Spur (XIVth-XVth Century), with six-pointed rowel.

241. Spur (XVth Century), with neck 3¼ in. long and six-pointed rowel 3 in. in diameter.

242. Spur of Beaded Iron, with curved lip at the base of the neck and eight-pointed rowel.



LARGE ROWEL SPUR (VI, 243).

243-244. Pair of large Spurs (XVth Century), with necks 5¼ in. long, and eight-pointed rowels 8 in. in diameter.

245. Spur, with straight neck, rowel missing ; much rusted.

246. Portion of Spur (XVth Century), with neck 8 in. long, rowel missing ; much rusted.

247. Spur (XVth Century), with eight-pointed rowel ; much rusted.

248. Portion of Spur (XVth Century), rowel missing ; much rusted.

249. Spur (XVth Century), with curved lip at the base of the neck, which is 8in. long, and six-pointed rowel.

250. Spur, similar to the above.

251. Spur, with short, curved neck ; much rusted ; rowel wanting.



(VI, 252).



(VI, 263).
ROWEL SPURS.



(VI, 267).

252. Spur, with neck ending in a fleur-de-lys, and rowel of thirty-three points. On the outside is engraved A TRUE KNIGHT OF GOD, ANGER ME AND TRY, and on the inside, WIN THEME 1574 AND WARE THME. It retains its original leather.

253. Spur (XVIth Century), with eight-pointed rowel.

Presented by C. Beard, Esq., in 1913.

254-255. Pair of Spurs (XVIth-XVIIth Century), with necks set at an acute angle, and six-pointed rowels.

256-260. Spurs, of similar type to the above.

261-262. Two Spurs (German, XVIth-XVIIth Century), with curved necks. The branches are engraved with lines, and are hinged in the middle. The strap loop is shaped.

263-264. Pair of Spurs (XVIIth Century), with necks set at an acute angle. These are of richly cut steel, and have large perforated five-pointed rowels.

265-266. Pair of Spurs, with necks 6in. long, and small rowels.

267-268. Pair of Spurs (XVIth-XVIIth Century), engraved and inlaid with brass, the rowels eight-pointed, $3\frac{1}{2}$ in. in diameter. The loops for the leathers are decorated with pierced work.

269-271. Three Spurs (XVIth-XVIIth Century) with small rowels.

272. Portion of a Brass Spur, with neck at right angles, and rowel missing.



(VI, 273).



(VI, 281).

ROWEL SPURS.



(VI, 283).

273. Spur (XVIth-XVIIth Century), with neck at an acute angle, and five-pointed rowel.

274-275. Pair of Spurs (XVIth-XVIIth Century) of cable pattern, with necks set at acute angle, and five-pointed rowels.

276. Spur (XVIth-XVIIth Century), with swan neck; much rusted.

277. Spur similar to the above.

278. Spur (XVIIth Century), with neck at right angles, and five-pointed rowel; rusted.

279-280. Pair of Brass Spurs, with necks 8in. long, and eight-pointed rowels. The leathers are covered with crimson velvet.

281-282. Pair of Spurs, with branches inlaid with silver ∞ -pattern, and rowels of twenty-eight points. They retain the original leathers, embroidered with silver.

283-285. Three large Spanish Spurs, with eight-pointed rowels. These spurs are stated by Meyrick to have been introduced into England during the reign of Philip and Mary, but the type survived in the eighteenth century.

286. Branches of a Spur, similar to the above.

287-288. Pair of Spurs of King Charles I when Prince, with five-pointed rowels riveted to the jambs. They form part of the armour II.90, VI.60, 119, 120.

289-290. Pair of Spurs of King Charles I, with perforated six-pointed rowels. They are riveted on to and form part of the suit II.91.

291-292. Pair of Spurs (XVIIth Century), with necks set at an acute angle, and five-pointed rowels.

293-294. Pair of Spurs (XVIIth Century), with leathers.

295-296. Pair of Steel Spurs, with necks bent at right angles, and large six-pointed rowels.

297. Large Spanish Prick Spur, with circular heel-plate damascened with silver.

298. Brass Spur (XVIIth Century) with five-pointed rowel.

299. Spur of thin steel, with six-pointed rowel.

300. Spur (XVIIth Century), with small rowel.

301-302. Spurs (XVIIth Century) with eight-pointed, perforated rowel.

303. Spur (German, XVIIth Century), with engraved lines and curved neck. The small rowel is seven-pointed.

304. Spur, with small rowel.

305. Spur of Brass, Plated with Silver (XVIIth-XVIIIth Century), with short neck and eight-pointed rowel.

306-307. Pair of Spurs, of the same type as the above.

308-309. Pair of Brass Prick Spurs (XVIIIth Century) copies.

310. Spur (XVIIth Century), with branches $4\frac{1}{2}$ in. wide, for use with large jack-boots, and small rowel.

311. Small Brass Spur, inlaid with mother-o'-pearl and tortoiseshell ; small rowel.

312. Spur and Spur-leather, with branches 4 in. wide, and small rowel.

313. Spur of Cut Steel (XVIIth Century), with very short neck, and small rowel.

314. Long Branches of a Spur, the neck wanting.

315. Prick Spur ; modern.

316. Rowel Spur ; modern.

END OF VOLUME I.

Foulkes, Charles John

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